

SERVICE MANUAL

DELI MULTISERIE

MODELS

Fri-Jado Deli Multiserie with Full Automatic Cleaning



- NOTICE -

This manual is prepared for the use of trained Service Technicians and should not be used by those not properly qualified. If you have attended a training for this product, you may be qualified to perform all the procedures in this manual.

This manual is not intended to be all encompassing. If you have not attended a training for this product, you should read, in its entirety, the repair procedure you wish to perform to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained technician.

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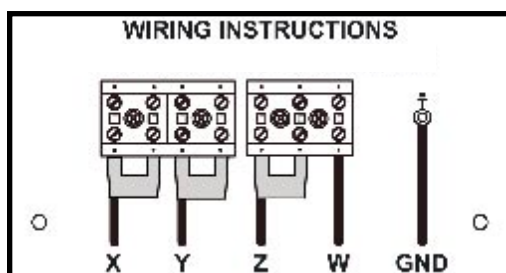
GENERAL TECHNICAL DATA

This manual covers the Fri-Jado Deli Multiserie ovens. All of the information, illustrations and specifications contained in this manual are based on the latest product information available at the time of printing.

TECHNICAL DATA

Type	Deli Multiserie
Power	20.6 kW
Fuses needed with power connection 208/120 V, 3~ 60 Hz	3x 60 A
Power connection (see figure below)	208/120 V, 3 ~60 Hz
Net weight	588 lbs.
Gross weight	640 lbs.
Height incl. underframe	75"
Width	39 3/4"
Depth	51 1/4"

Warning: all electrical connections must comply with local codes.



WATER REQUIREMENTS

Water hardness	2.0 - 4.0 grains per gallon
pH	7.0 - 8.0
Chlorides	less than 30 ppm
Water pressure at inlet point	minimum 30 psi at 4 gallons per minute

Use sediment pre-filter or a strainer for the reduction of silica and other non-dissolved sediments plus an active carbon pre-filter for the reduction of chlorine. In case of water hardness of 4 grains per gallon or more, use a decalcifying filter for reducing calcium. Contact your local water supplier for details regarding water quality.

Water pressure available to the Multiserie (after passing the filters) must be at a minimum of 30 PSI at 4 gallons per minute flow.

Note: all shown values and screens are examples. For parameter settings refer to page 9.

SETTINGS MENU



IN MAIN MENU's

Navigate by arrows up and down or the dial.

Change value by left or right arrow.

Entering Submenu (>) by "right" arrow or "OK" button

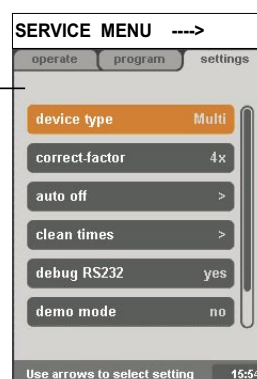
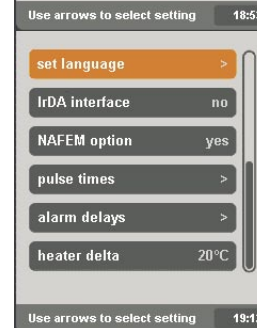
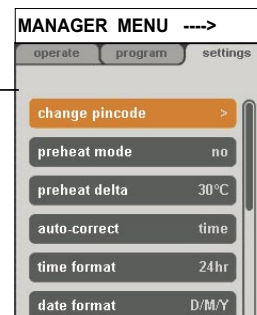
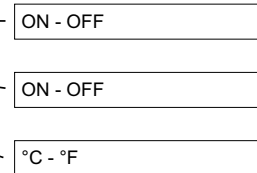
IN SUBMENU's

Navigate by left or right arrow

Change value by up or down arrow or the dial

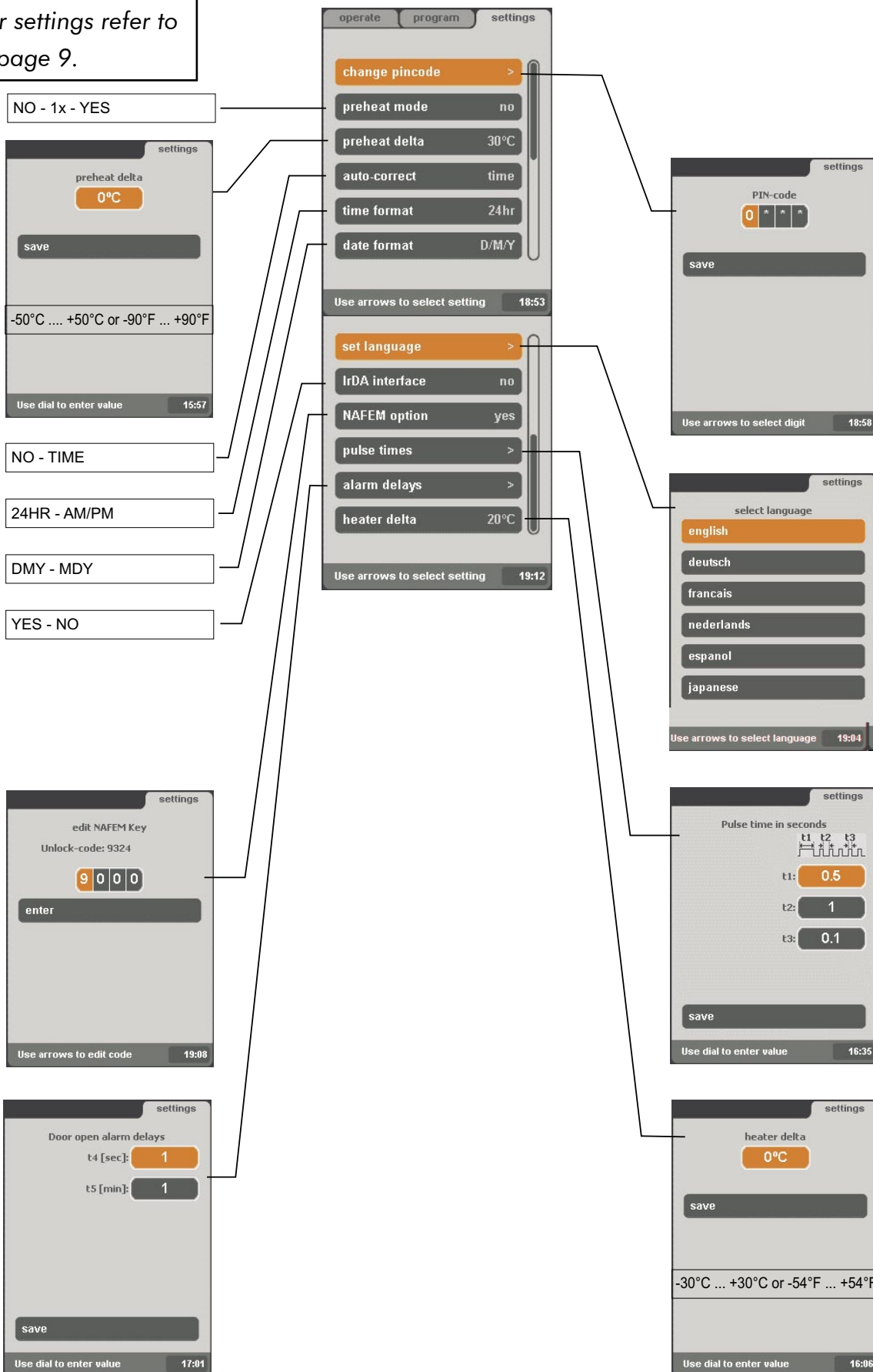
Confirm and leave menu with "OK" button

Leave menu without change with "CANCEL" button.



Note: all shown values and screens are examples. For parameter settings refer to page 9.

MANAGER MENU



Note: all shown values and screens are examples. For parameter settings refer to page 9.

SERVICE MENU access code 4878

MULTI - M BAKE - STGi

1 10

YES - NO

YES - NO

operate program settings

device type Multi

correct-factor 4x

auto off >

clean times >

debug RS232 yes

demo mode no

Use arrows to select setting 15:54

I/O test >

Use arrows to select setting 16:04

settings

Auto off

t6 [min]: 120

save

Use dial to enter value 16:46

INPUT / OUTPUT TEST ---->

operate program settings

Front panel v

MFMC inputs v

MFMB inputs v

MFMB outputs v

MFS1 inputs v

MFS1 outputs v

Use arrows to select setting 16:51

settings

Clean-timing in minutes

Adding Cleaner t1: 8

Dry Soak t2: 10

Wet Soak t3: 30

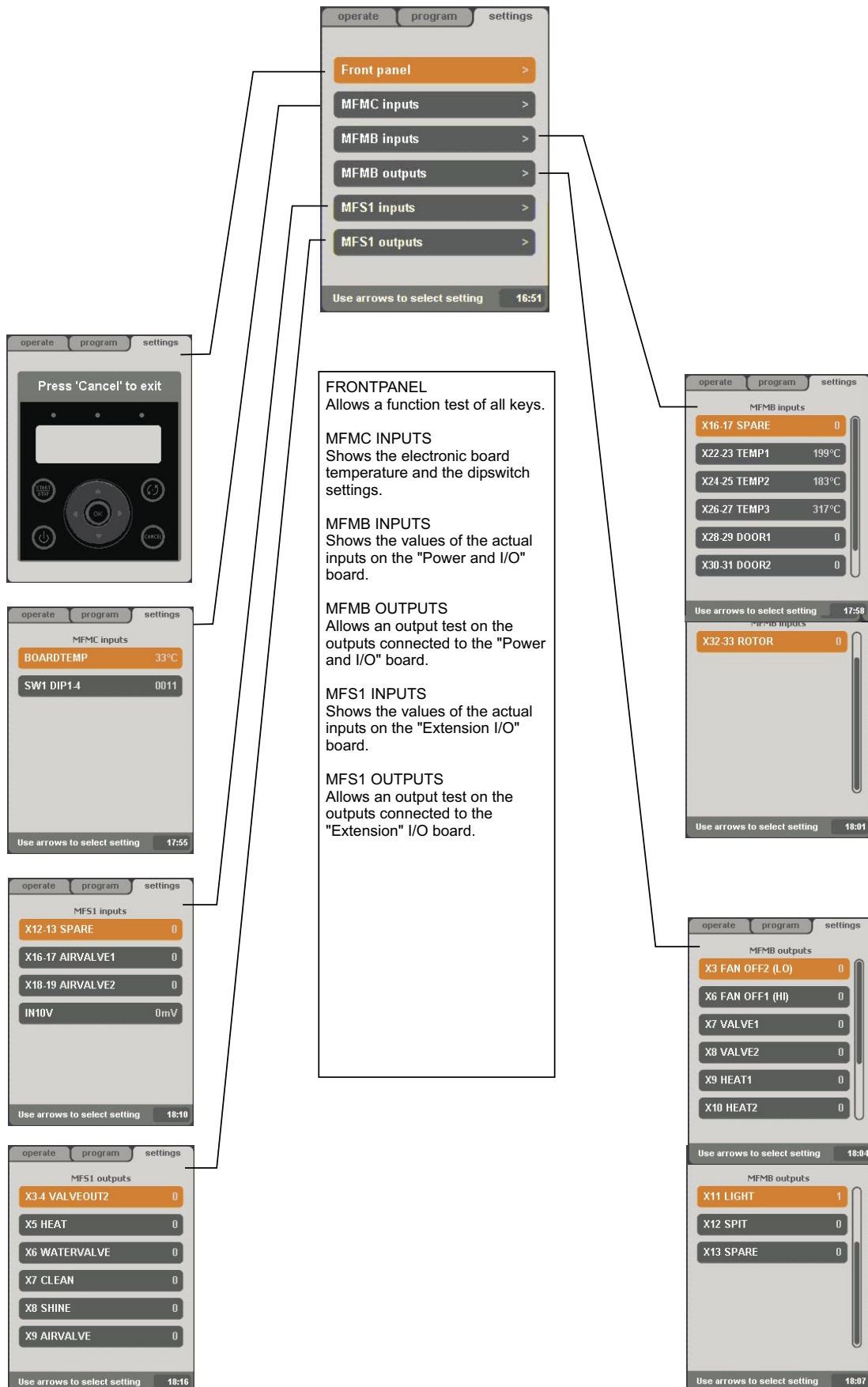
Rinsing t4: 4

Drying t5: 30

save

Use dial to enter value 16:56

INPUT / OUTPUT TEST

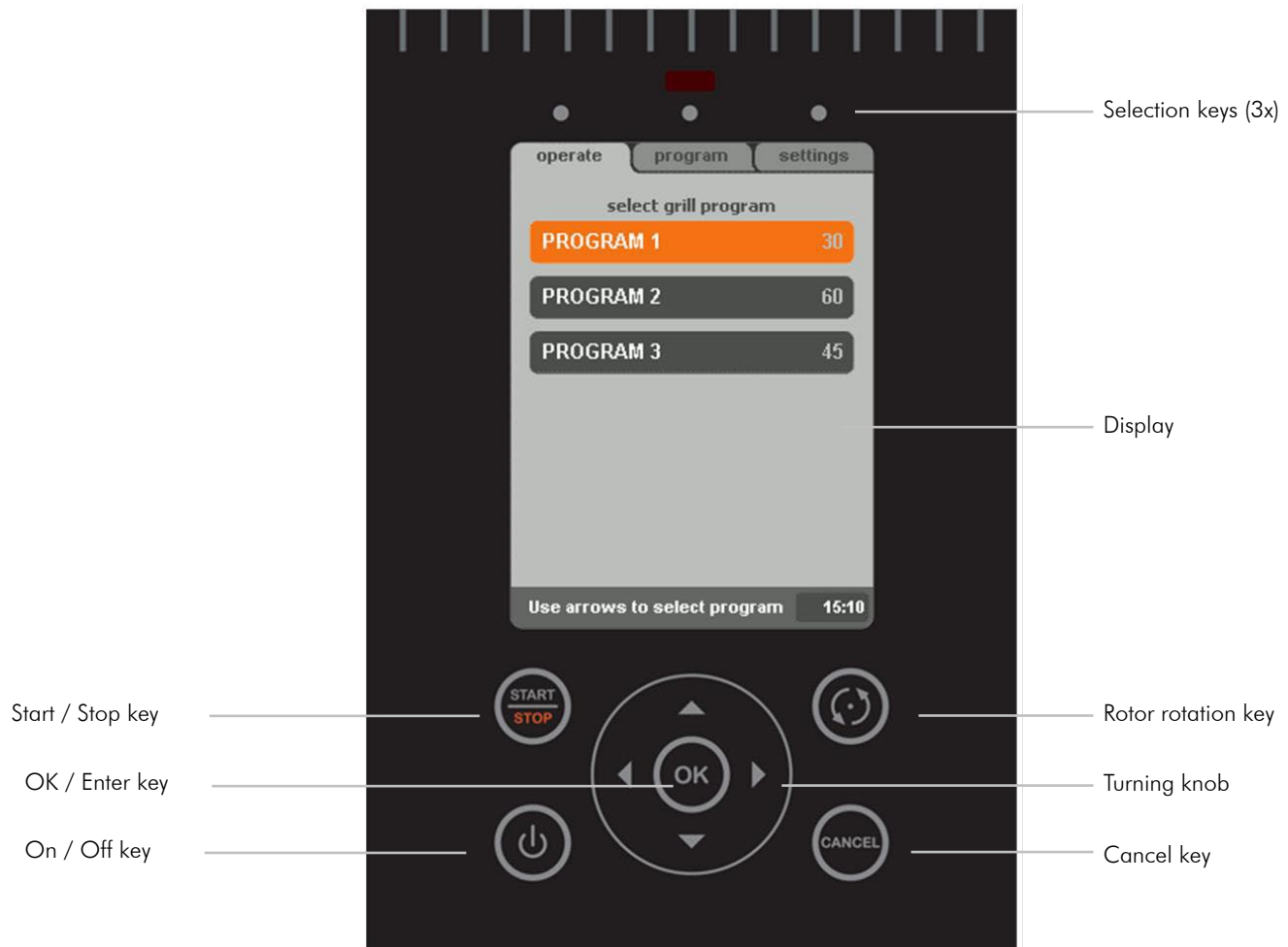


DEFAULT PARAMETERS

SETTINGS MENU		
Light		
Alarm signal		
Temperature		
Set time		
Set date		
Set contrast		
Information		
Manager --->	MANAGER MENU	
	Change pincode	
	Preheat mode	
	Preheat delta	
	Auto-correct	
	Time format	
	Date format	
	Set language	
	Irda interface	
	Nafem option	
	Pulse times -->	t1
		t2
		t3
	Alarm delays -->	t4
		t5
	Heater delta	
Service --->	SERVICE MENU	
	Device type	
	Correct factor	
	auto off (t6)	
	clean times -->	Adding clnr (t1)
		Dry soak (t2)
		Wet soak (t3)
		Rinsing (t4)
		Drying (t5)
	Debug RS 232	
	Demo mode	
	I/O test	

Default	Possibilities
on	on - off
on	on - off
°F	°C - °F
Dutch time	
Actual date	
75	0....120
softw. version	
0000	
no	no - 1x - yes
0°F	-50°C... +50°C or -0°F... +90°F
no	no - time
am/pm	24hr - am/pm
MDY	DMY - MDY
English	various
no	yes - no
no	no - "password"
0,5 sec.	0,1....10
3 sec.	1....10
0,1 sec.	0,1....1
1 sec.	1....17
1 min.	1....60
0°F	-30°C... +30°C or -4°F... +54°F
Multi	Multi - M-bake - MultiM - Bake-i - STG-b - STGi
4x	1....10
120 min.	no....240
8 min.	0 10
10 min.	0....30
30 min.	0....60
4 min.	0....10
30 min.	0....60
no	yes - no
no	yes - no
-	-

DISPLAY AND KEYS

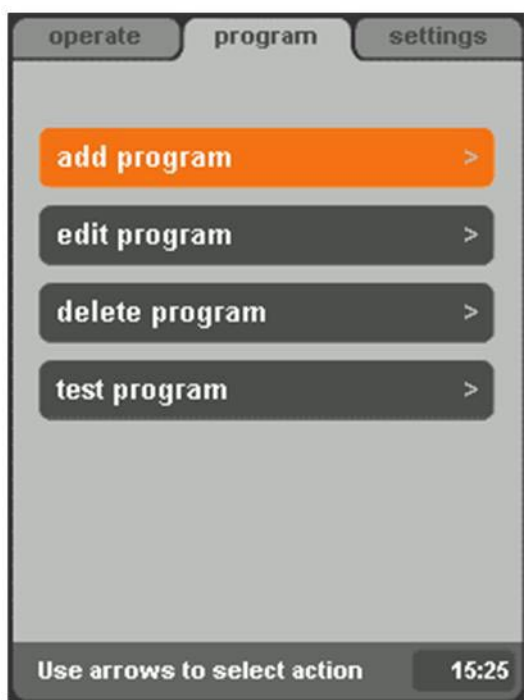


SETTING THE MULTISERIE

Press and hold the On/Off key during 2 seconds. The display lights up and the multisserie is ON.



ADD A PROGRAM



Press program key.

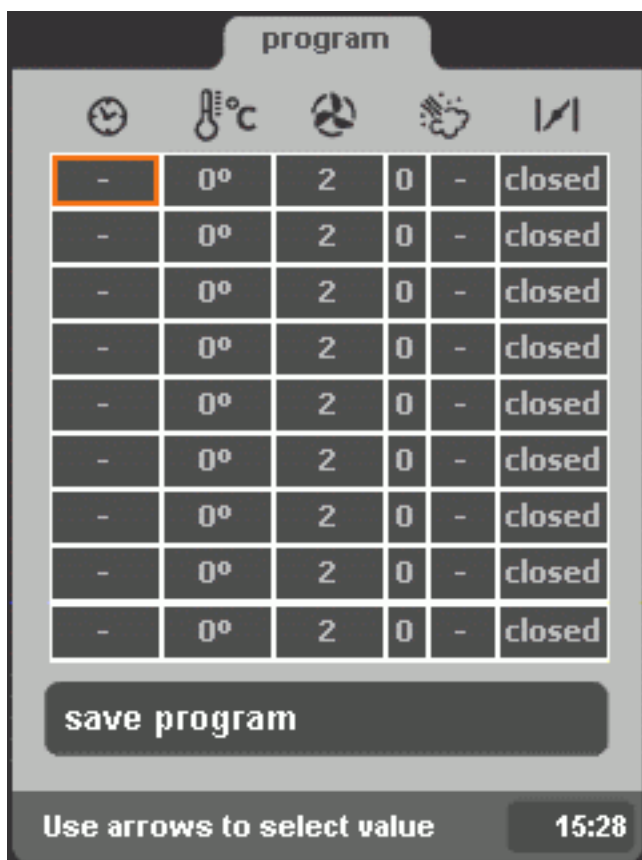
Note: when a pincode has been set, first enter the pincode and confirm with OK.

Add program by using the sensitive wheel and confirm with OK.

Edit the program name by using the sensitive wheel and press OK twice to confirm.



ADD A PROGRAM



Select time table with the wheel and press OK to confirm. Set the time of the grilling step and press OK to confirm.

Select temperature table with the wheel and press OK to confirm. Set the temperature of the grilling step and press OK to confirm.

Select blower speed with the wheel and press OK to confirm.

Select steam mode with the wheel and press OK to confirm. Select number of steam pulses and press OK to confirm.

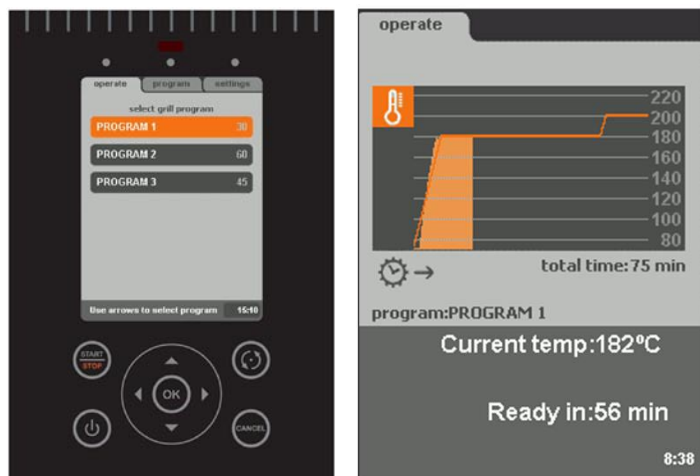
Program next grilling step if necessary.

Program temperature HOLD if necessary. Select next time table and set this on HOLD with the wheel and press OK to confirm.

Select temperature table with the wheel and press OK to confirm.

Go to save program and press OK to confirm.

PROGRAM START

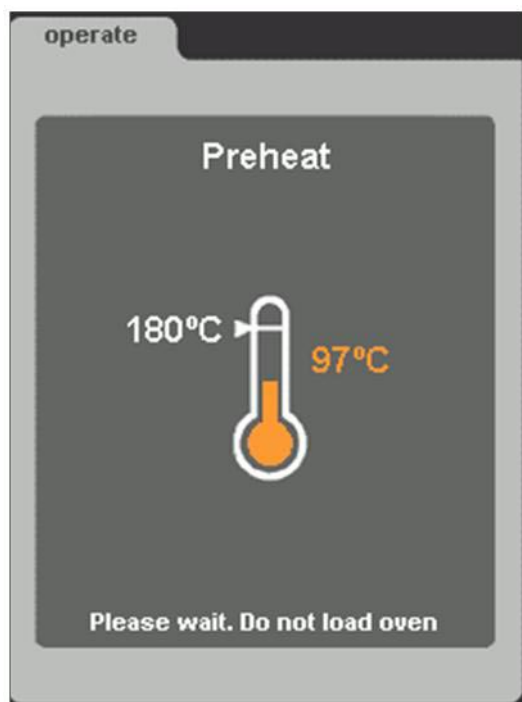


Press operate key.

Select program with the turning knob and confirm with OK.

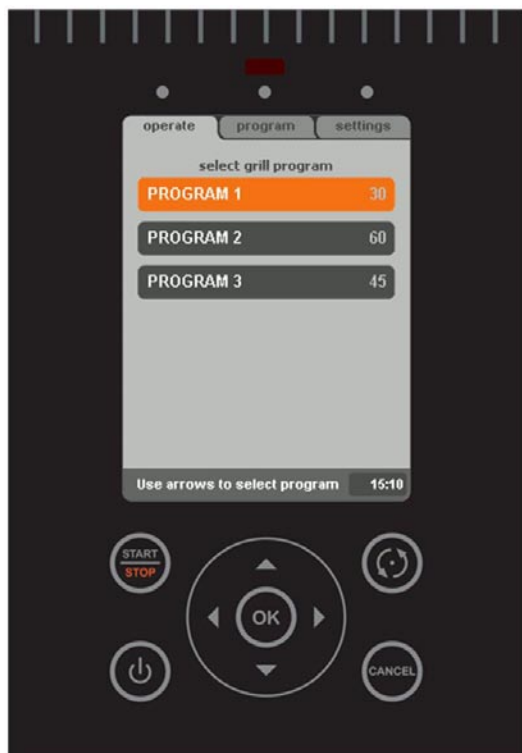
When no pre heating is activated, process starts and is indicated by means of a heating diagram.

PRE HEATING



When preheating step is activated in manager menu, the multiserie will start up with the preheat program after the program start. After reaching the preheat temperature the display will indicate: load products.

LOADING WITH PRODUCTS



Press rotor key to start turning the rotor

Press rotor key again to stop

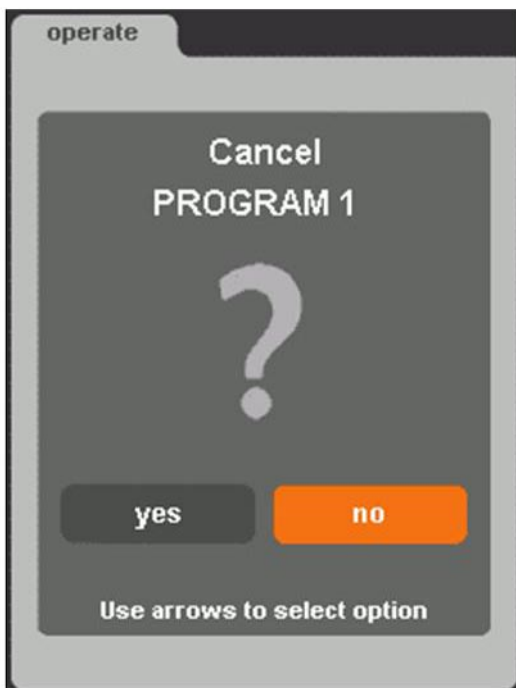
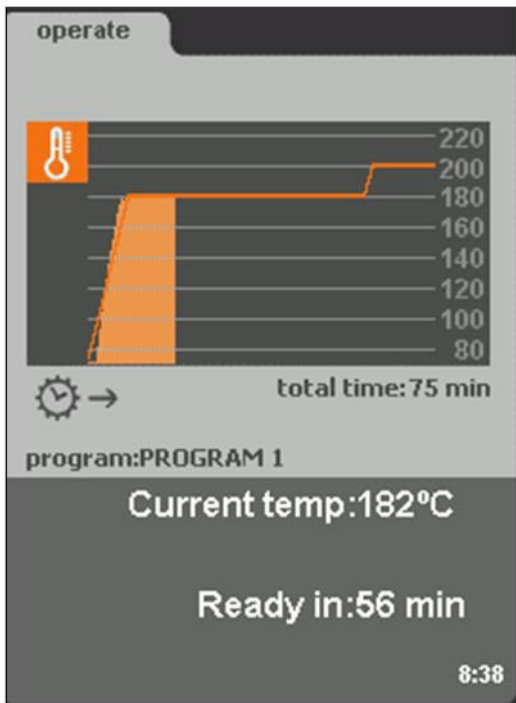
Load the multiserie with products

Close the door and press the start key.

PROGRAM STOP

Press cancel key.

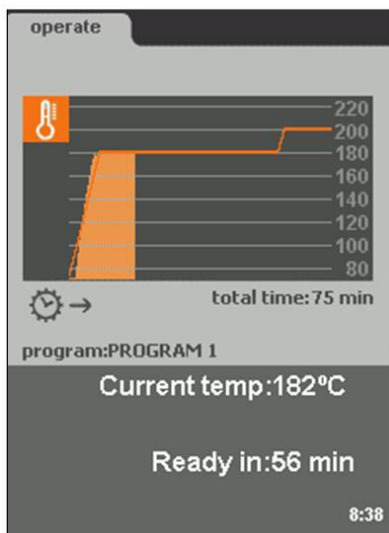
Select yes with turning knob and confirm with OK.



OPTIONAL SETTINGS

- Interrupting active program.
- Editing a program.
- Deleting a program.
- Running in test program.
- Demo mode.

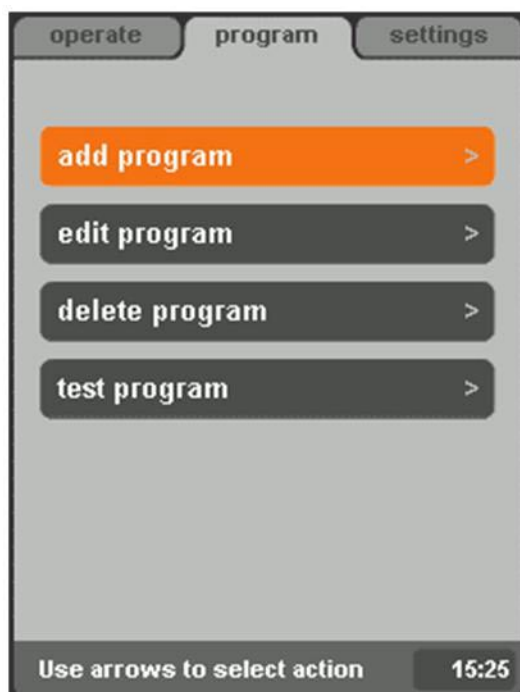
INTERRUPTING ACTIVE PROGRAM



Press start/stop key. Heating, blowers and rotation stops.

Press start/stop key again to resume.

EDIT A PROGRAM



Press program key.

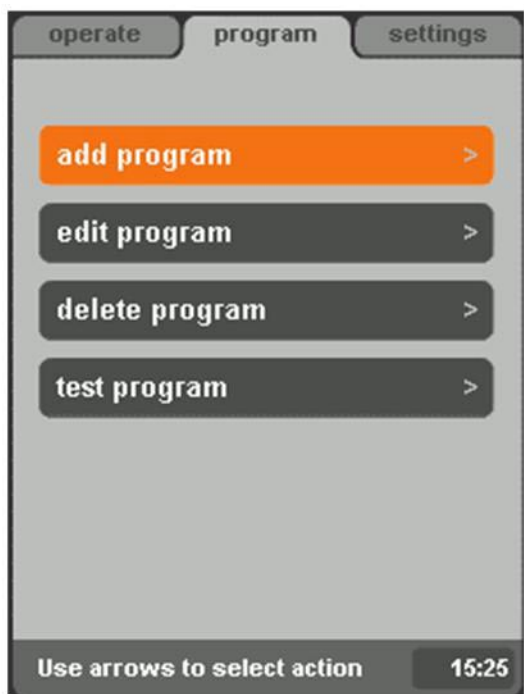
Note: when a pincode has been set, first enter the pincode and confirm with OK.

Go to edit program with turning knob and confirm with OK.

Now change the name if necessary and confirm with OK.

Now change time and temperature if necessary. Then go to save program and confirm with OK.

DELETE A PROGRAM



Press program key.

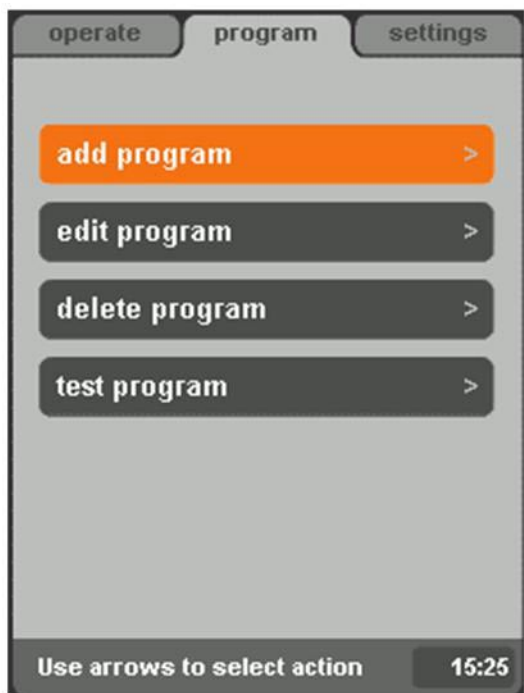
Note: when a pincode has been set, first enter the pincode and confirm with OK.

Go to delete program with turning knob and confirm with OK.

Now select the program to delete and confirm with OK.

Select yes with turning knob and confirm with OK.

TEST PROGRAM



In the test program you can run a program and you have the possibility to change time and temperature during the process.

Press program key.

Note: when a pincode has been set, first enter the pincode and confirm with OK.

Go to test program with the turning knob and confirm with OK.

Now select the program and confirm with OK. If you press the OK key during the program you can change the settings.

Go to save program and confirm with OK. New settings are now saved.

DEMO MODE



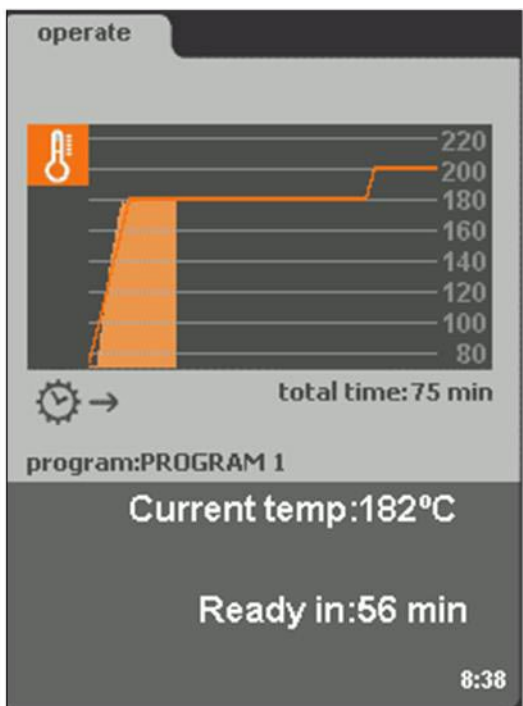
In the demo mode you can simulate a cooking cycle. This is used for exhibitions and runs just on 1 phase (L1).

Go to the service menu and activate the access code 4878.

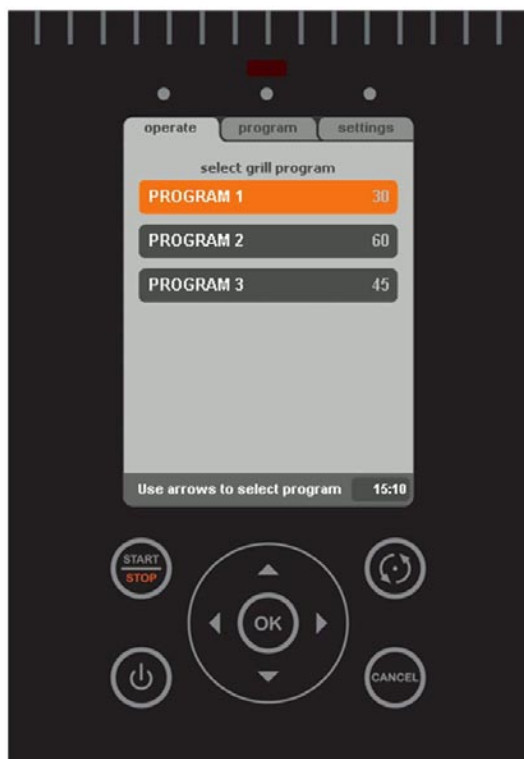
Go to demo mode with the turning knob and adjust this on yes.

Go to operate and select a program with the turning knob and confirm with OK.

Start the program and now on the display the program is simulated by means of a heating diagram.



SWITCH OFF THE MULTISSERIE



Press and hold both keys On/Off and settings until the display light goes out and the rotisserie is OFF

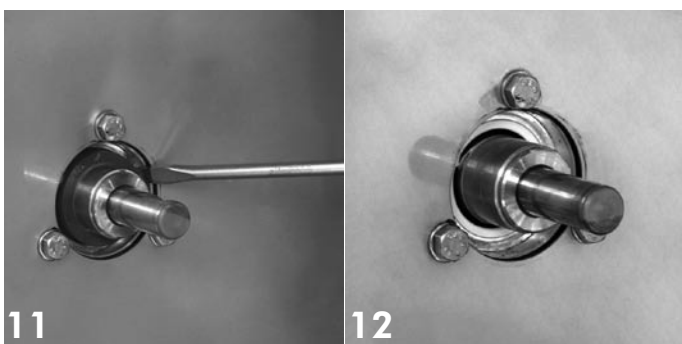
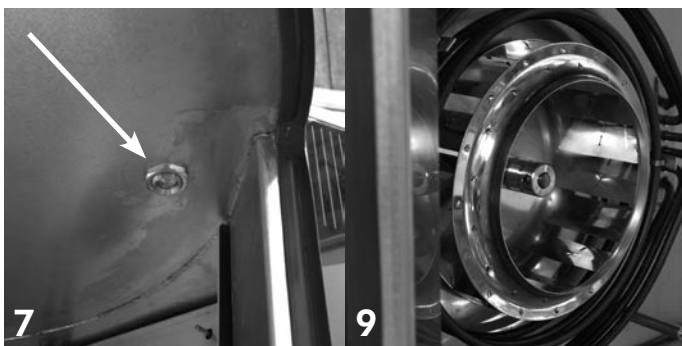
REMOVAL AND REPLACEMENT OF PARTS FOR THE DELI MULTISERIE

WARNING: Disconnect the electrical power to the machine at the main circuit box. Place a tag on the circuit box indicating the circuit is being serviced.

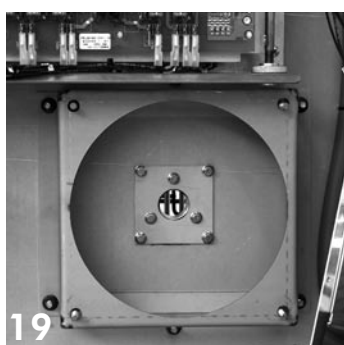
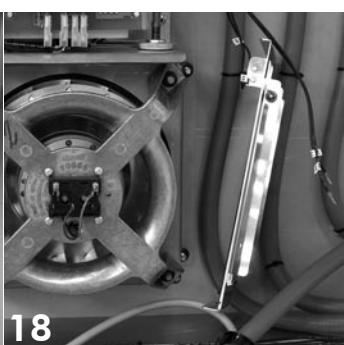
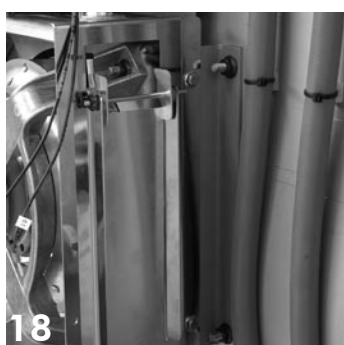
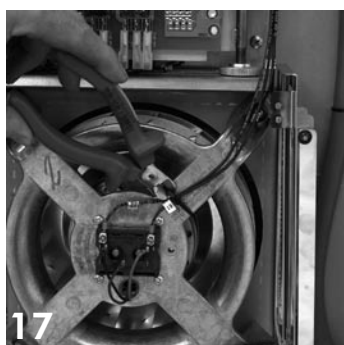
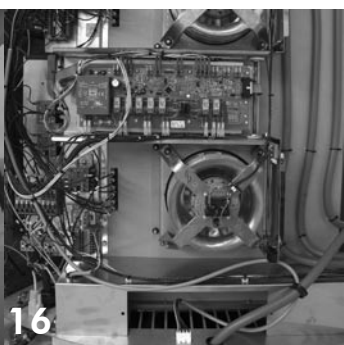
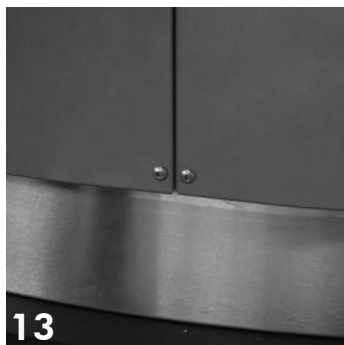
DISMOUNTING THE VENTILATORS

Note: numbers in brackets are positions on the exploded views

1. Remove all chicken racks and/or baskets.
2. Remove the fat filters (105)
3. Remove the filter holder base-plate (118-1) (2 wingnuts M6)
4. Remove the filter holder (118) (2 wingnuts M6)
5. Remove the 4 spacers (117-1).
6. Loosen the upper swivels (129) from the water injection pipe couplings.
7. Remove the nut from the cleaning agent injector (182) and push the injector above the top plate.
8. Remove the ventilator plate. (117)
9. Loosen the socket set-screw from the ventilator blade at least 3 turns.
10. Pull the blade from the shaft. Maybe with help of a (jaw) puller. (see tips)
11. Loosen the socket set-screw (96) and remove the adjusting ring (97).
12. Remove the sealing ring (95).



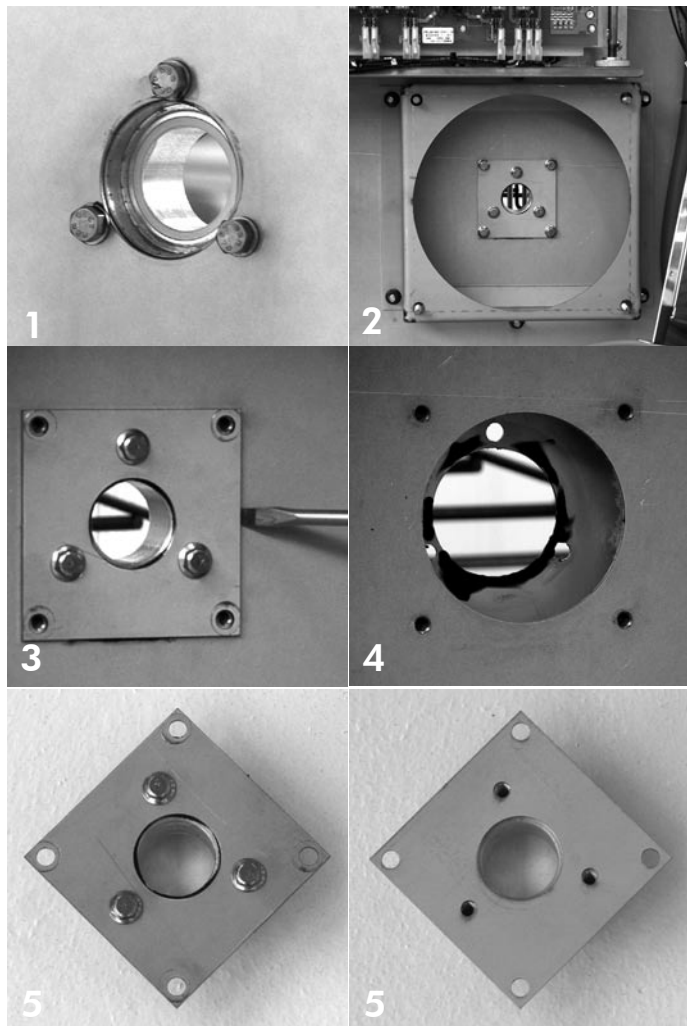
DISMOUNTING THE VENTILATORS (CONTINUED)



On the back side:

13. Open the 2 service doors. (179)(4 screws).
14. Disconnect the 2 capacitors (119) from the ventilator motor(s).
15. Take the hose and the electric cable out of the transit hole.
16. Remove the vertical air suction channel. (157) (2 nuts M6 en 2x nut/bolt M5)
17. Disconnect the wiring from the 2 screw terminals of the ventilator motor(s).
18. Remove the vane switch (99) (2x M5 serrated bolt) ???
19. Remove the 4 nuts (M6 serrated) from the aluminium motor-housing and carefully take out the ventilator. Repeat this if necessary with the other ventilator.

DISMOUNTING THE SEATING OF THE SHAFT SEALING RING



Dismount the ventilator(s) according the procedure above.

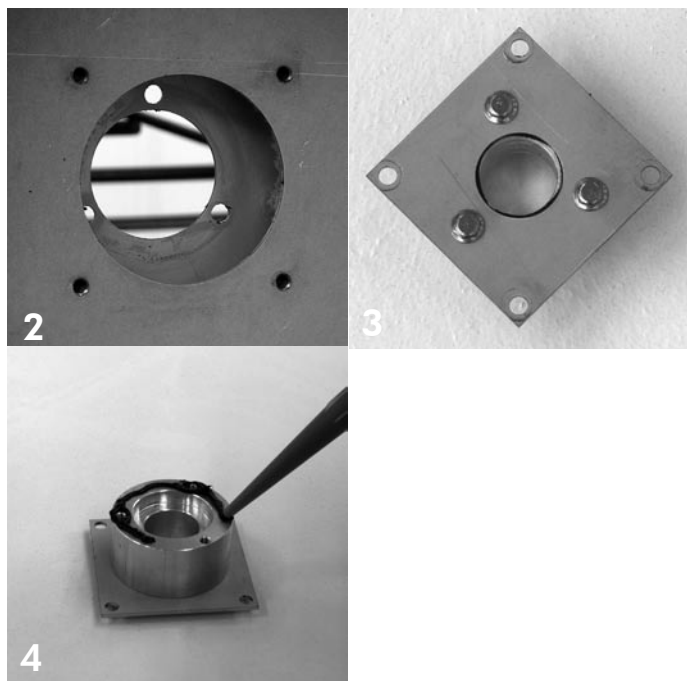
On the inside:

1. Remove the 3 bolts (M5x12).

On the backside:

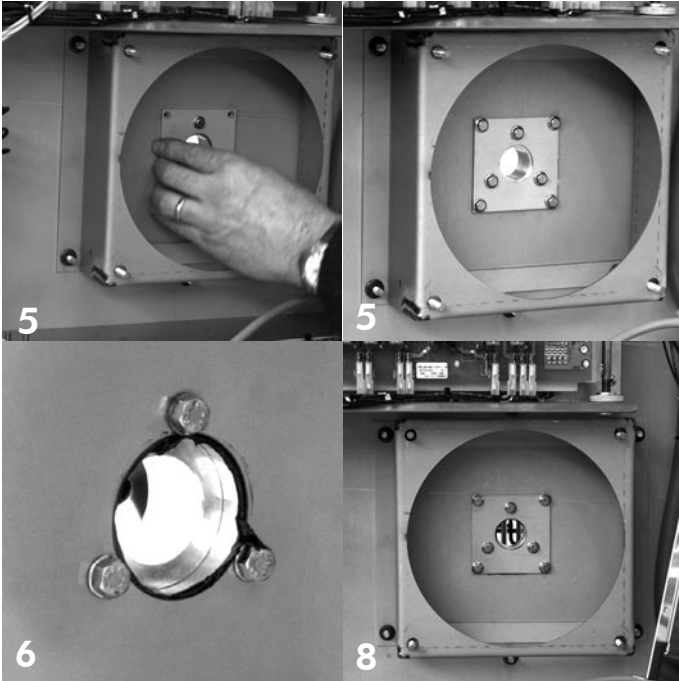
2. Remove the 4 bolts (M5x12) on the edge of the mounting plate. (94).
3. Stab loose the mounting plate with a screw driver (or the like). (The aluminium seating is sealed at the front side with sealant and can possibly stick)
4. Pull the mountingplate with the seating out of the hole.
5. Remove the mounting plate from the seating (3 bolts M5x12).

MOUNTING THE SEATING OF THE SHAFT SEALING RING



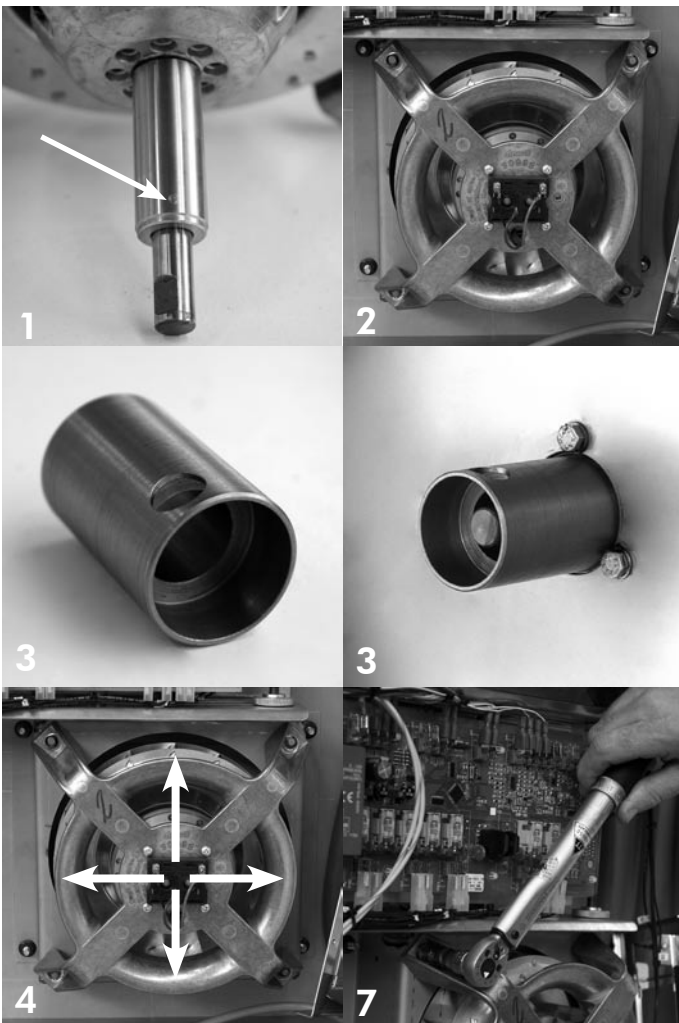
1. Clean and degrease the "old" seating or take a new one.
2. Clean and degrease the contact-surface from the inner oven wall with the seating.
3. Mount the mounting plate half-fastened on the aluminium seating (3 bolts M5x10 serrated).
4. Put a layer of heat resistant sealant (644°F) on the contact-surface of the seating.

MOUNTING THE SEATING OF THE SHAFT SEALING RING (CONTINUED)



5. Push the seating on its place (1 bolt centre-up !) against the inner oven-wall and mount the 4 bolts half-fastened (M5x10 serrated).
6. Mount the 3 bolts on the inside and fasten them (M5x8 with washer).
7. Remove the redundant sealant with a cloth or the like.
8. Now fasten the 7 bolts at the rear.

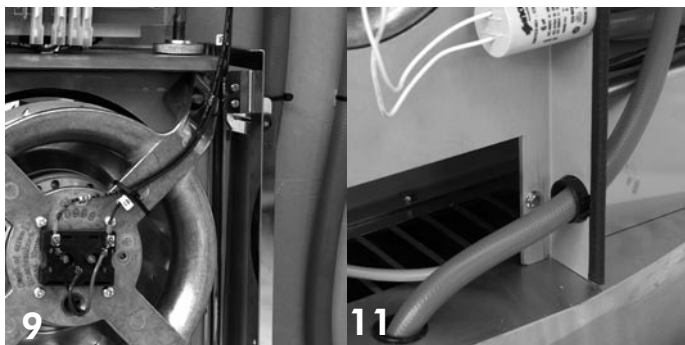
MOUNTING THE VENTILATORS



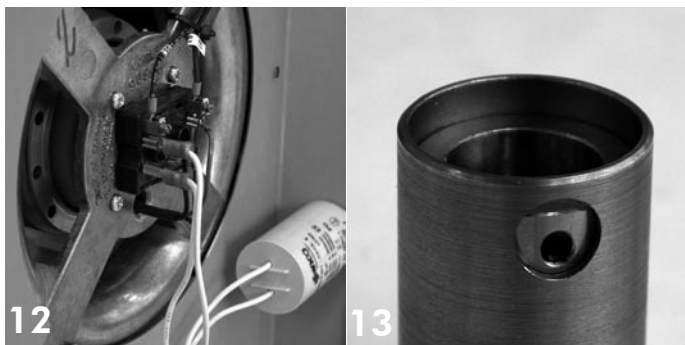
1. Carefully file away the damaging on the ventilator shaft caused by the socket set-screw of the adjusting ring.
2. Put the ventilator motor on its position and place the nuts. Not tight!! (M6 serrated black).
3. Slide the mounting accessory on the inside in the aluminum seating with the hollow side outwards.
4. Try to get the ventilator in the middle of the hole by means of little sliding movements.
5. Fasten the nuts a little bit.
6. Remove the mounting accessory.
7. Now fasten the nuts. Torque 9 9/16 lbf.ft
8. Check if the shaft comes through the middle of the hole of the aluminum seating. If not, then the ventilator motor has to be loosened and moved in the right direction.

Note: With a new ventilator it could be possible that some holes have to be filed-out in order to get the ventilator in position.

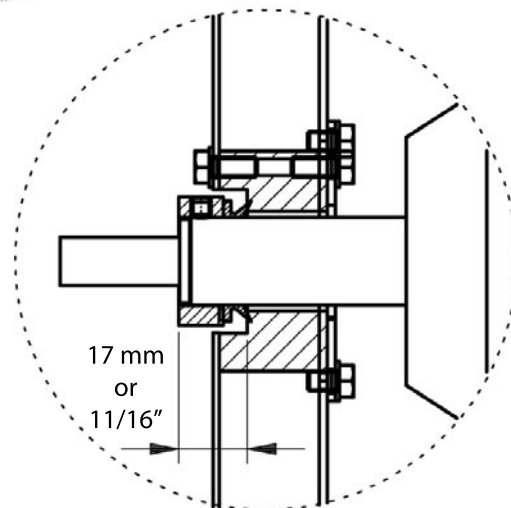
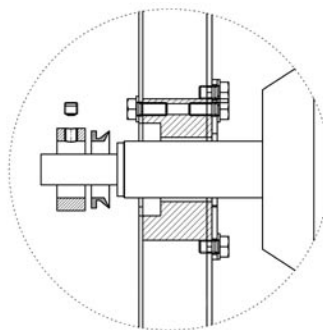
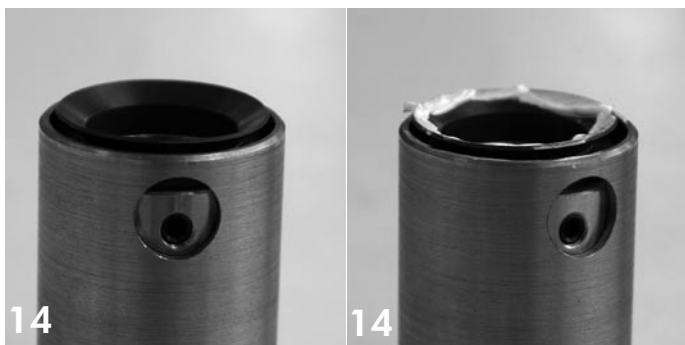
MOUNTING THE VENTILATORS (CONTINUED)



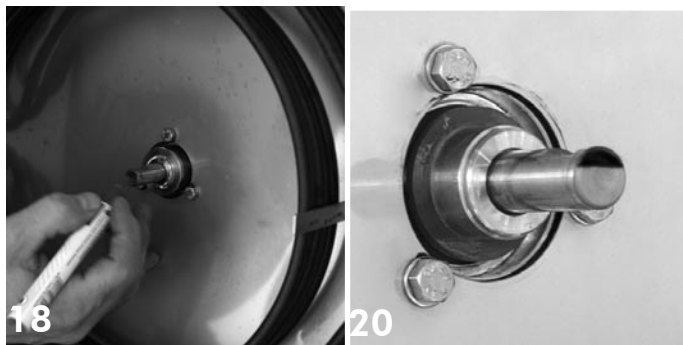
9. Connect the wiring to the screw terminals of the ventilator motor and mount a new tyrap.
10. Mount the vane switch. (2x bolt M5x10 serrated)
11. Mount the vertical air suction channel. Pay attention to the position of the transithole of the waterhose and electrical cord! (2 nuts M6 en 2x nut/bolt M5)
12. Connect the capacitor wiring to the ventilator motor.



- On the inside:
13. Lay the adjusting ring in the mounting accessory with the set-screw in front of the hole.
 14. Lay the shaft sealing-ring on the adjusting-ring in the mounting accessory (see drawing for the right position) and put a layer of (sanitation (FDA) approved) lubricant 9191109.



MOUNTING THE VENTILATORS (CONTINUED)



15. Slide the assembly over the ventilator shaft and push the accessory as far as possible to the rear.

16. Fasten the socket set-screw.

17. Measure the distance of the adjusting ring to the tread of the seating with a caliper. This has to be $11/16''$. See drawing. If not good, than repeat the above.

18. Mark the position of the flat surface of the shaft on the shaft head.

19. Place the blade in such a way that the socket set-screw is positioned square to the flat surface on the shaft.

20. Slowly fasten the set-screw while the centre of the flat surface is surched by moving the ventilator blade with short left/right movements. Slide the ventilator blade as far as possible on the shaft just before the set-screw is completely tight.

21. Fasten the screw.

22. Place the ventilator plate (117).

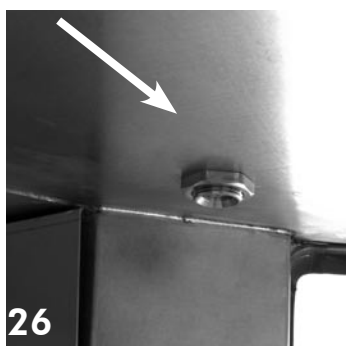
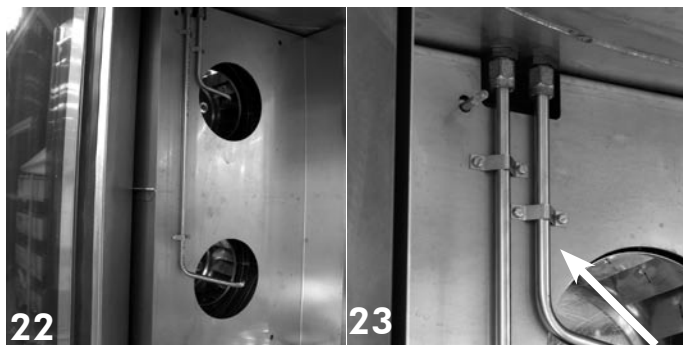
23. Fasten the swivels of the waterinjection-pipe couplings. (129) Take care of the distance of the pipes to the ventilator shaft!! 3-5mm

24. Place the 4 spacers and mount the filter holder and filterholder base-plate. (118 and 118-1) (4 wingnuts M6).

25. Place the fat filters (105).

26. Mount the nut from the cleaning agent injector. (182)

27. Put in the chicken rack and/or meatbaskets.



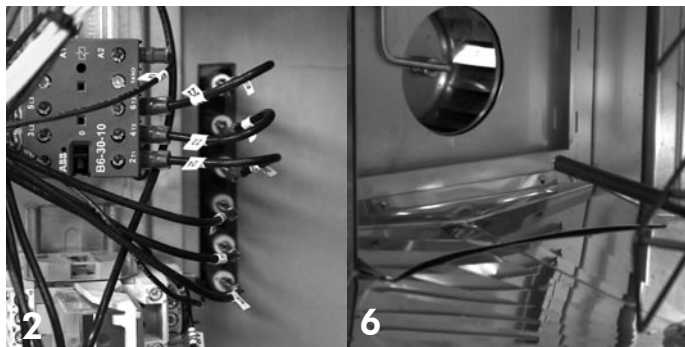
REPLACING THE SHAFT SEALING RING

For dismounting, follow point 1 untill 12 from "dismounting the ventilators".

Before mounting, clean the aluminum seating if necessary. Carefully file away the damaging on the ventilator shaft caused by the socket set-screw of the adjustingring.

For mounting, follow point 13 untill 27 from "mounting the ventilators"

REPLACEMENT OF A HEATING ELEMENT



On the backside:

1. Open the left service door.
2. Check the presence of the numbering on the wiring of the heating elements and make a note of this.
3. Pull the 6 wires from the heating element.

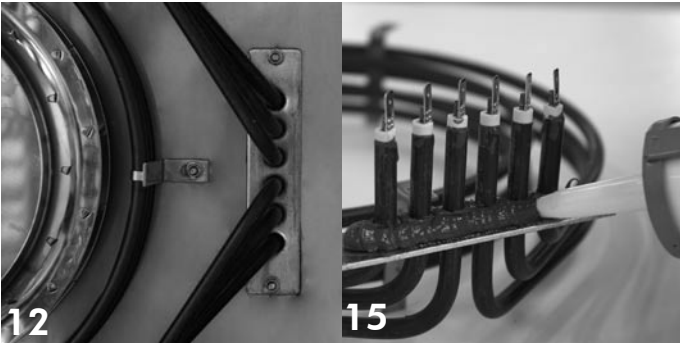
On the inside:



4. Remove all chicken racks and/or baskets.
5. Remove the fat filters (105)
6. Remove the filter holder base-plate (118-1) (2 wingnuts M6)
7. Remove the filter holder (118) (2 wingnuts M6)
8. Remove the 4 spacers (117-1).
9. Loosen the upper swivels (129) from the water-injection-pipe couplings.
10. Remove the nut from the cleaning agent injector (182) and push the injector above the top plate.
11. Remove the ventilator plate. (117)
12. Unscrew the heating element.



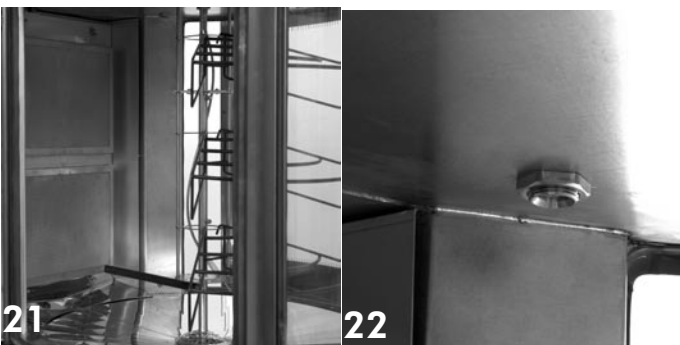
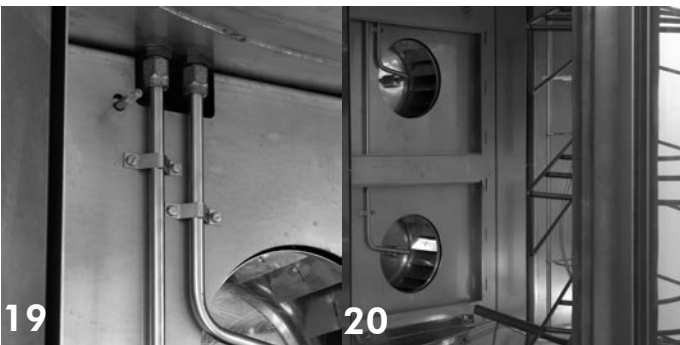
REPLACEMENT OF A HEATING ELEMENT



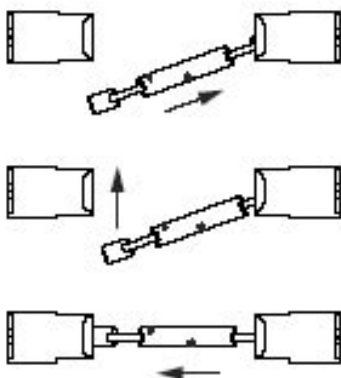
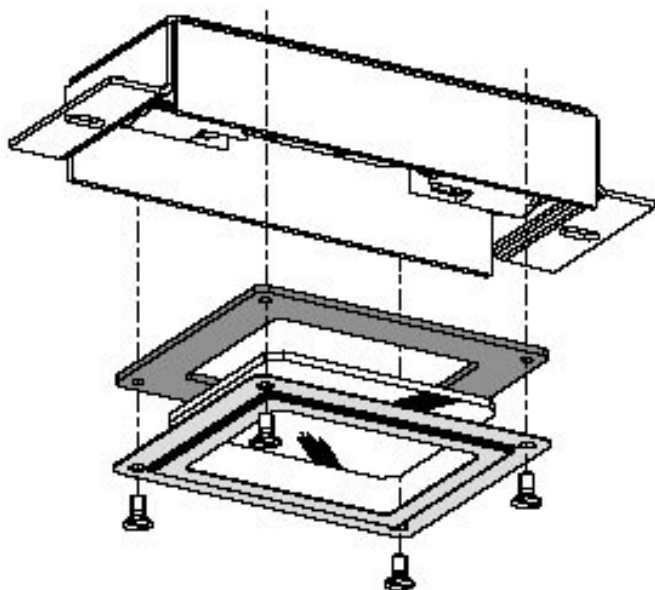
13. Take out the heating element. This could be stuck caused by the sealant used.
14. Clean the back wall.
15. Provide the new heating element amply sufficient of heat resistant sealant (644°F)
16. Put the heating element in the right position over the studs, place the nuts and fasten these (5xM4).
17. Remove the redundant sealant on the inside with a cloth or the like.
18. Place the ventilator plate (117).
19. Fasten the swivels of the water injection-pipe couplings. (129) Take care of the distance of the pipes to the ventilator shaft!! 3-5mm
20. Place the 4 spacers and mount the filter holder and filterholder base-plate. (118 en 118-1) (4 wingnuts M6).
21. Place the fat filters (105).
22. Mount the nut from the cleaning agent injector. (182)
23. Put in the chicken racks and/or meatbaskets.

On the backside:

24. Connect the wiring on the heating elements.
Take care that the receptacles are fixed tight.



REPLACEMENT OF A DEFECTIVE LAMP



Notice: Do not touch the lamps with bare hands. Use a clean cloth or paper tissues when replacing the lamp. Remove any moisture with alcohol and methylated spirits after the lamp has cooled down.

1. Remove the plug from the wall socket.
2. Remove the 4 screws from the lamp holder.
Beware, the frame, glass and gasket will come off at the same time.
3. Remove the defective lamp. Move the lamp along the length to one side of the lamp holder.
4. Install a new halogen lamp (**120 V – 150 W R7s – 3 1/16"**). First press one side of the lamp into one connection point, then put the lamp properly in its place and have it spring into the other connection point.
5. Make sure the lamp is properly clamped between the two connection points. When it has not been clamped properly, it can be moved back and forth along the length until it clicks into the connection points and is firmly clamped.
6. Install the gasket, glass and frame.
7. Before fastening the screws completely, move the glass to the middle of the frame. It is the intension that the glass corners do not touch the edge.

ELECTRICAL TESTS AND SERVICE PROCEDURES

PROGRAMMING WITH FIPS

In order to start communication between your computer and the Multiserie, the following parameters have to be checked and changed if necessary:

Menu	Item	Setting
Manager menu	IrDA interface	no
Service menu	debug RS232	yes
Service menu	demo mode	no

Open FIPS with the short cut on the desk top of your computer. Connect RS232 cable between computer and unit. Select the com port of the computer (usually com 1). To communicate between computer and unit, first always select "Connect" button.



The pull down menu's.

The file menu.



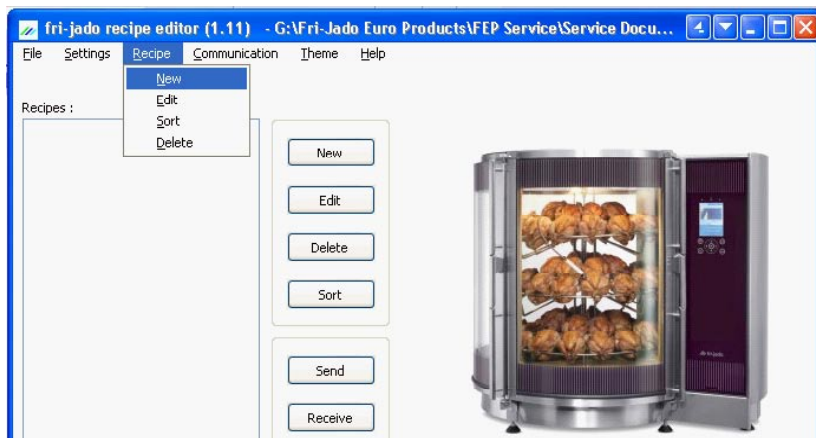
- New:** Opens a new file. The recipes field is made empty. And you will be asked if the current recipes have to be stored.
- Open:** Opens an existing program.
- Save as:** Saves the new made or modified program.
- Import:** Importing parts of existing programs.
- Print:** Makes a print out of the selected programs.
- Exit:** Closes FIPS.

The settings menu



- Device:** Selection of equipment.
- Temperature:** Selection of temperature indication. °C or °F.

The recipe menu



- New: To make a new recipe.
- Edit: Changing selected recipe.
- Sort: Sorting all recipes alphabetically.
- Delete: Deleting of selected recipe.

The communication menu



- Select grill: Selection of IP address.
- Receiving all recipes from grill: Download all recipes. Recipes also stay in grill.
- Send all recipes to grill: Upload all recipes to grill. All recipes will be overwritten.
- Store grill settings to file: For future use.
- Restore grill settings from file: For future use.
- Update grill software: Upload of new system software. Recipes stay in grill.
- HACCP: Download of all cooking data.
- Configuration: Network connections: Information.
- Modem: Information.
- Phone book: Information.
- Receive time out: Fault messages when no connection in seconds.
- Device information: Information.
- View settings: Communication settings.

The theme menu.



Always adjust to Fri-Jado.

The help menu



About: Indication of the FIPS version.

The buttons



- New: Making of a new recipe.
- Edit: Changing selected recipe.
- Delete: Deleting of selected recipe.
- Sort: Sorting all recipes alphabetically.
- Send: Sending of a recipe to grill.
- Receive: Download of a recipe from grill. Existing recipe stays in grill.
- Connect: Making connection between computer and grill.
- Com: Selection of com port computer.
- Disconnect: Aborting connection with grill.

KEYPAD TEST



To perform a keypad test the unit must be switched off first. Another possibility is to activate this in the "service menu" under "I/O test" and "front panel".

There are 2 keypads. One for the selection keys in the top and one for the function keys below.

1. Press and hold the On/Off key during 5 seconds. On display the front panel is indicated, see below.
2. Press all keys and the turning knob to execute a full test of all keys. This is indicated by an orange square on the key.
3. Press the "cancel" key to exit.

TROUBLESHOOTING

GENERAL TROUBLESHOOTING

Symptom	Possible cause	Caused by
Product not cooked, cooking takes more time	Air circulation problem	Fanblade loose
		Adjustment of sealring too tight
		Blower(s) defect
		Blower(s) not aligned
		Capacitor defect
		Transformer defect
		Control defect
		Filters blocked
	Short of heat	Heating element defect
		Relais defect
		Fane switch defect
		Control defect
		Sensor defect
		Wire loose
		Security thermostat off
	Program ends too soon	Core probe defect
		Core probe still hot when starting program
		Sliding contact on rotor dirty or defect.
	Cooking program wrong	Wrong programming
		Wrong product
Bad cooking results, uneven cooking	No rotation	Chain broken or derailed
		Motor defect
		Capacitor defect
		Control defect
		Bearing defect
		Rotor support comes loose
	Too much heat	Contacteur hangs
		Sensor defect
		Core probe shortened
	Too much steam	Watervalue defect
		Dirt in watervalue
	No or too little steam	Dirt in watervalue
		Waterpressure too low
		Tubes calcified
		Leaking hose
		Control defect
		No heating
	Program does not reach the end	Core probe shortened
		Wrong programming

Symptom	Possible cause	Caused by
Rotation does not stop or stops in wrong position	Detector switch rotor defect	
	Reed contact door shortened	
	Control defect	
Bag overloaded	Watervalue defect (too much steam)	
	Too much steam in program	
Oven cavity fills up	Drain sieve clogged	Valve, relay or control defect
	Drain valve in wrong position	
	Tube clogged by fat from bag	
Sewage get clogged	Drain valve in wrong position	Valve, relay or control defect
Overflow bag	Drain valve in wrong position	Valve, relay or control defect
Less or no lighting	One or more lamps defect	
	Control defect	
	Calcifying or greasing of lamp glasses	
	Broken lamp gasket	
Bad cleaning result	No steam	See bad cooking due to no steam
		Water tap closed
		Filter clogged
	No rinse water	Valve defect
		Control defect
		Hose disconnected
		Water pressure too low (<2bar)
		Water tap closed
	No detergent	Compressor failure
		Nozzle defect
		Air leakage
		Fluid leakage
		Pressure reducer valve defect
		Container incorrect connected
		Container empty
	Wrong detergent	
Bad drying	Control defect	
Leakage of steam at the doors or drain	Door not right adjusted	
	Doorgasket damaged	
	Air exhaust valve clogged	
Deterioration of components, rubbers	Wrong detergent	
	Cleaning instructions neglected	
Drip drains clogged	Door not right adjusted	
	Doorgasket damaged	
	Cleaning instructions neglected	

Symptom	Possible cause	Caused by
Controls defect	Leakage of steam through ventilator shaft	
	Leakage of steam through heating element	
	Cooling air flow blocked	
	Fuses blown	

ANALYTICAL TROUBLESHOOTING

This is an analytic description for servicing and repairing all major parts of the Deli Multiserie. It consists of 4 basic steps to recognize and solve the problems:

1. Symptoms.
2. Possible causes.
3. Solving of the problem: checking/action.
4. Replacing of parts and testing:
 - a. Replacing is described in this service manual.
 - b. For programming and controls see page 5 of this manual.

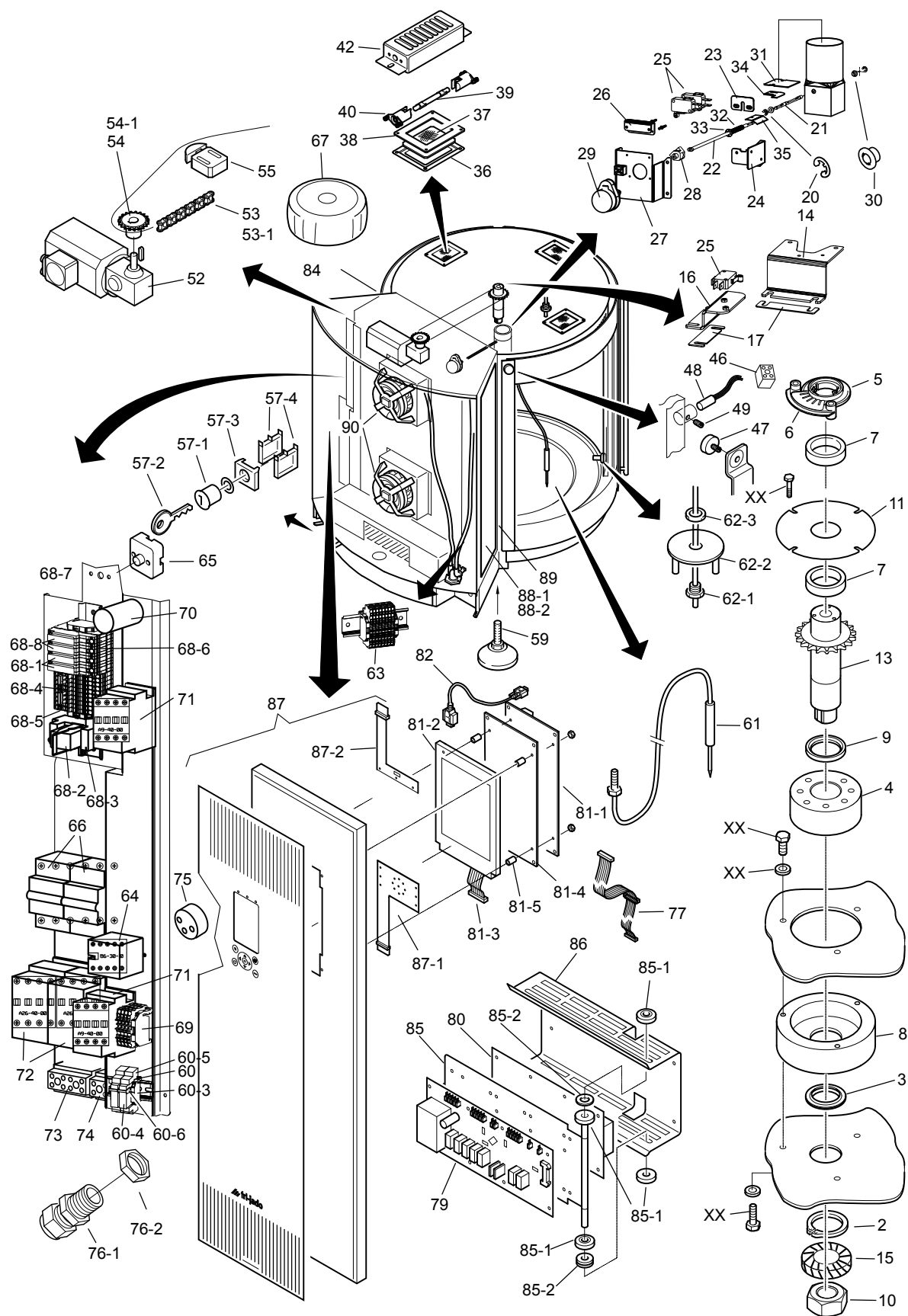
Description of part	Symptoms	Possible cause	Action
Control defect	Key board fails. No display. Display shows strange things. Outputs fail. Inputs fail.	Loose flatcable. Broken part.	Check keyboard and I/O boards. See I/O test in service menu.
		Fuses blown	Check fuses
		Relais defect	Check relay
		Wrong software or loss of data.	Check software version or upload latest software
		Parameters not on right settings.	Check parameters
		Steam leakage	Check sealing of shaft and heating elements.
		Transformer output voltage too high.	Check transformer.
		Temperature too high.	Check cooling air flow. Clean grids.
Security thermostat	Heating of Multiserie fails	Problem with ventilators. (rotate too slow) Malfunction of vane switches. Sticking contact(s) of contactor(s). Broken thermostat.	Check these items.
Steam leakage	Controller not stable. Programs act strange. Controller switches off during program. Visibility of LCD gets worse.	Leakage of steam through ventilator shaft. Leakage of steam through heating element	Check sealings of these items. (remove ventilator plate pos 117 and the fanblade of the blower)
Cooling air flow	Controller overheated	Cooling air flow blocked.	Clean air grids.

Description of part	Symptoms	Possible cause	Action
Relay for compressor, water filter etc.	The output is not switching on	Broken contact	Replace relay
	The output is not switching off	Contact sticks, relay hangs	Replace relay
Transformer defect	Unable to switch ON the Multisserie. Controller not stable.	Supply voltage too high. Output current too high. Internal short circuit in transformer (gets hot). Interrupted coil.	Check and replace transformer if necessary.
Heating element	Mutisserie does not reach the adjusted temperature. Product not ready in time. Uneven cooking	Heating element defect Wire loose	Check heating element and wiring. Replace if necessary.
Contactor	Product overcooked Uneven cooking Cooking takes more time Product not ready in time	Contactor hangs (contacts stick together) Contacts do not make contact Contactor does not function Controller problem.	Check contactor. Check controller (output test)
Blower	Cooking takes more time Bad cooking result Uneven cooking Vibrating and/or squeaking noise. Blower rotates too slow.	Fanblade loose Adjustment of sealing too tight Blower shaft stuck by dirt or broken shaft sealing. Blower(s) defect. Blower(s) not aligned Capacitor defect Wiring or controller problem. Transformer broken or wrong connected.	Fix fanblade Check adjustment. Check blower shaft. Check coil resistance. Check coil insulation. Check bearing Check adjustment. Check capacitor Check transformer.
Vane switch	Product not ready in time. Heating elements do not switch on.	Micro switch stays open. Wiring loose. Wing of vane switch stuck. Blower rotates too slow.	Remove dirt and/or obstacles from wing. Check wiring and microswitch. Check voltage on ventilator.
	Security thermostat switched off. Fire behind ventilator plate.	Wing of vane switch stuck. Microswitch stays closed.	
Rotor	Rotor does not rotate	Motor defect. Chain broken or derailed. Bearing defect. Capacitor defect. Rotor support comes loose.	Check these items.
Rotor switch	Rotor does not stop, or does not stop in right position.	Detector switch rotor defect	Replace (opto)switch
		Positioning disc displaced	Check adjustment and fix it.

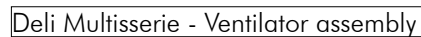
Description of part	Symptoms	Possible cause	Action
Sensor	Temperature read-out on LCD is not stable.	Upper sensor defect. Wire loose.	Check sensor and wiring. See also input test in service menu
	Product over cooked. Cooking takes more time. Uneven cooking.	Upper or lower sensor defect. (resistance too low)	Check sensor and wiring. See also input test in service menu
	Cooking takes more time	Upper or lower sensor defect. (resistance too high).	Check sensor and wiring. See also input test in service menu
	Uneven cooking (difference between lower and higher racks)	Upper or lower sensor defect. Offset parameter not right adjusted. See service menu.	Check sensor and wiring. See also input test and parameters in service menu.
Core sensor	Baking program never ends and product overcooked.	Core Sensor defect (resistance too low)	Replace sensor if wiring is ok.
	Baking program ends too soon	Core sensor defect (resistance too high).	Replace sensor if wiring is ok.
		Customer starts program while core sensor is still hot.	Give instructions how to use.
Sliding contact (on rotor)	Baking program ends too soon	Bad or no contact (resistance too high).	Clean contact or replace.
Illumination	Less display effect	One or more lamps defect Calcifying or greasing of lamp glasses Broken lamp gasket	Replace lamps. Clean or replace lamp glasses. Replace gasket
Air exhaust valve	Steam blows along the door-gaskets. Trumpet sound when closing the door Whistle sound at the exhaust Product too wet Product too dry	Air exhaust valve clogged Air Exhaust valve malfunction	Check and or clean exhaust pipe and valve Check valve motor Check position switches on valve motor
Watervalue	Product too dry. Product too wet. Product not well proofed. (Bake version). Cleaning not ok.	Watervalue coil defect. Filter clogged. Dirt in watervalue. Reducer in watervalue clogged. Reducer in watervalue not well mounted.	Check coil. Clean valve if possible. Replace valve AND reducer.
Water supply	Product too dry. Product not well proofed. (Bake version). Cleaning not ok.	Water tap closed. Water pressure too low (<2bar). Filters blocked. Kink in hose.	Open tap. Check pressure. Check filters Search for a kink in the hose.

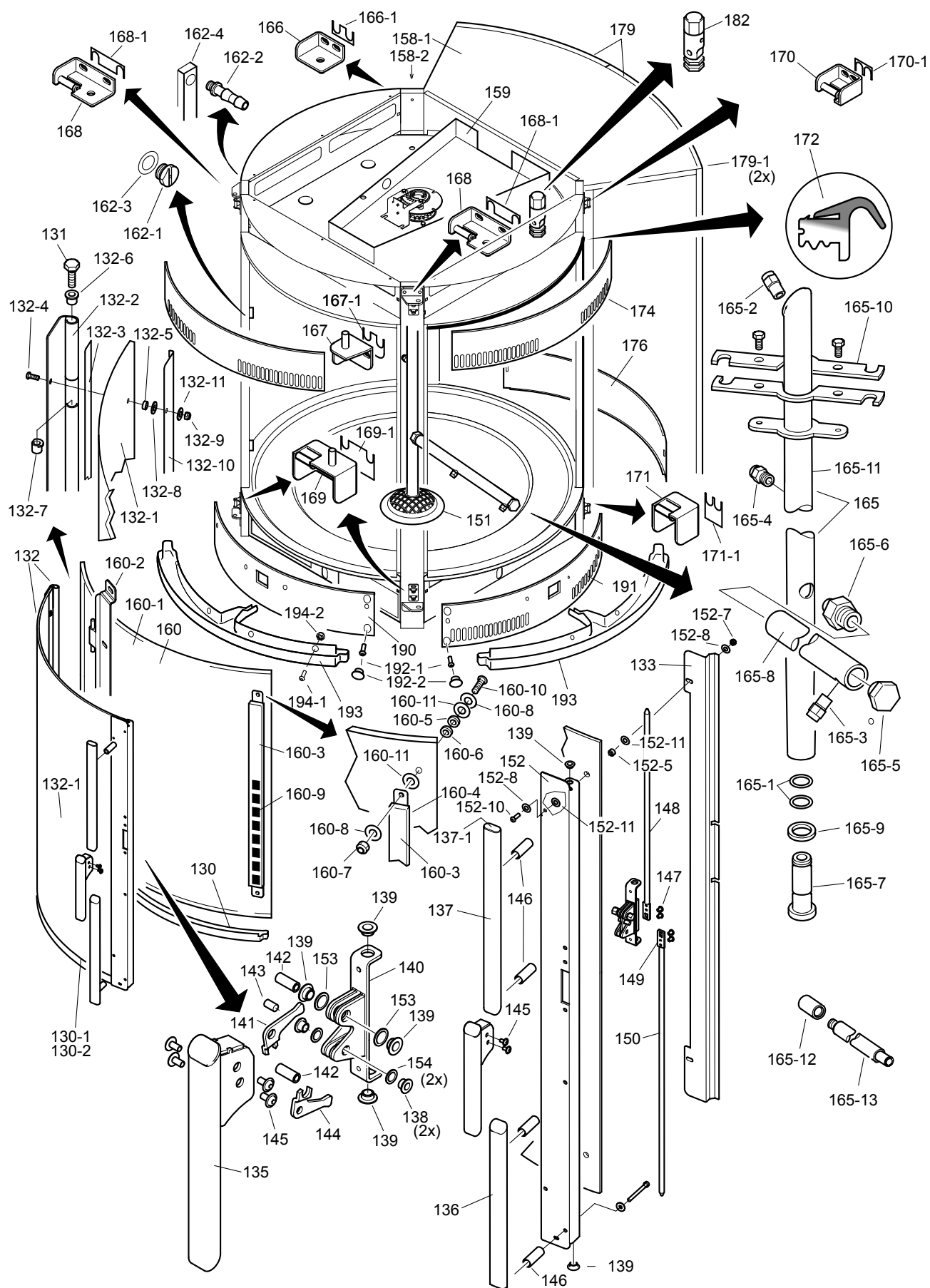
Description of part	Symptoms	Possible cause	Action
Tubes calcified	Product too dry. Product not well proofed. (Bake version)	Supply water not decalcified. Decalcifying equipment not ok. Decalcifying filter saturated.	Check water hardness. Change filter.
Door switch	Message door open appears while door is closed	Reed contact door shorted. Wiring shorted.	Check reed contact and/or wiring. Replace if necessary
	Blowers, heaters and rotor stay on while door is opened.	Reed contact defect. Wiring loose.	Check reed contact and/or wiring. Replace if necessary
Door	Door(s) are leaking.	Door not right adjusted	Adjust door.
	Door does not close smoothly	Door not right adjusted	Adjust door.
	Door lock not functioning	Doorlock broken or loose	Mount new parts and or fasten it.
	Broken glass of inside or outside door.	Slamming of door.	Give instruction to operator
		Fastenings bolts and nuts are loose.	Tighten all fastenings.
		No sealing ring between steel and glass.	Mount new glass with sealing rings between steel and glass.
Door gasket	Door(s) are leaking	Deterioration by (wrong) cleaning agent. Cleaning instructions neglected. Broken due to bumping, striking.	Give instructions
Compressor	Bad cleaning result	Compressor does not start or stops while power is on. Compressor does not give enough pressure. Controller problem.	Check power supply, capacitor, coil resistance, coil insulation. Check membrane and leakage of air hoses.
Pressure reducer valve	Bad cleaning result	Pressure valve adjusted on too low pressure Pressure valve defect	Replace and/or adjust pressure valve
	Bottle with cleaning agent broken Too much use of cleaning agent	Pressure valve adjusted on too high pressure Pressure valve defect	Replace and/or adjust pressure valve
Air controlled nozzle	Bad cleaning result	Nozzle leaks air. Nozzle does not open Nozzle leaks fluid.	Check nozzle.

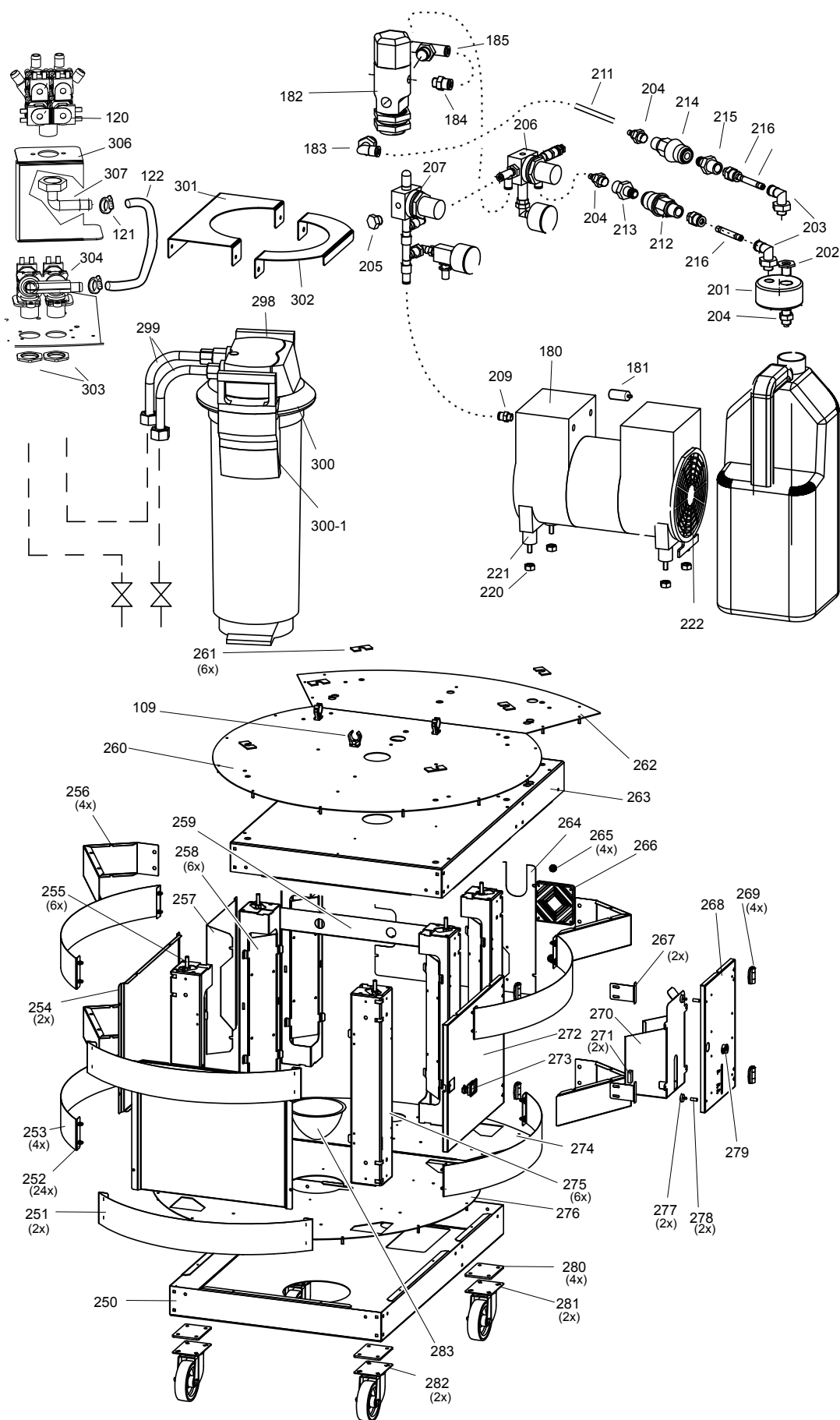
EXPLODED VIEWS & PARTLISTS



Deli Multisserie - electrical components







Deli Multisserie - underframe

Item	Part number	Qt.	Description
2	9191045	1	Clip ring 30 mm
3	9192012	1	Seal ring
4	9192017	1	Ball bearing
5	9192018	1	Sliding ring
6	9192019	1	Sliding contact
7	9192242	2	Spacing bush 9mm
8	9192048	1	Bearing block
9	9192053	1	Distance ring 40 mm
10	9192075	1	Nut, M22 x 1,5 stainless steel
11	9194448	1	Positioning disc
13	9190412	1	Shaft, chain wheel, ass.
14	9194445	1	Bracket, position switch
15	9191126	1	Lock washer M22
16	9194502	1	Bracket, position switch
17	9194503	2	Adjusting plate, position switch
20	9191041	2	Spring clip
21	9193100	1	Valve mechanism, short
22	9190510	1	Valve mechanism, long
23	9194328	1	Fastening plate
24	9194473	1	Bracket
25	3500109	3	End switch
26	9194472	1	Mounting plate, end switch
27	9194477	1	Bracket
28	9193101	1	Camshaft
29	9191198	1	Gearmotor
30	9191085	2	Plastic bearing
31	9194474	1	Valve
32	3500106	1	Spring
33	4285151	1	starlock washer, 6mm
34	9194476	1	lever
35	9194488		gripper plate
36	9194485	3	Cover profile, oven illumination
37	3500038	3	Glass, oven illumination
38	3500040	3	Sealing, oven illumination
39	9191196	3	Lamp, Halogen 150 W 120V
40	9052826	6	Lamp holder, halotherm
42	9194294	3	Cover
47	9084077	3	Magnet
48	3500020	3	Reed switch
49	9191049	3	Screw, adjusting M5x5
52	9190126	1	Gearmotor with chain-wheel
52	9191193	1	Gearmotor
53	9192014	1	Chain 3/8 x 7/32
53-1	9192015	1	Link for chain 3/8x7/32
54	9192235	1	Chain wheel
54-1		1	Clamp pin
55	9150145	1	Chain stretcher
57-1	9111180	1	Key + emergency switch

Item	Part number	Qt.	Description
57-2	9111187		Key, emergency switch
57-3	9111190	1	Adapter, emergency switch
57-4	9111200	2	Contact, emergency switch
59	9192063	6	Leg, adjustable
60		1	Connection terminal
60-3	9191222	2	End clamp din rail
60-4	9261031	2	Relay
60-5	9261032	2	Relay socket
60-6	9261030	2	Clamp relay socket
61	9192005	1	Core temperature probe
62-1	9192158	2	Temperature probe
62-2	9194382	2	Protection PT1000 probe
62-3	3704133	2	Nut 1/4"
63	9192243	1	Connecting terminal
64	9191181	1	Relay B6-30-10
65	9191188	1	Thermostat with reset, 360°C
66	9191206	2	Automatic fuse S203 B40
67	9192227	1	Transformer, blower
68	9192237	1	Connecting terminal, large (incl relay 68-2)
68-1	9191231	2	Fuse 10 A slow, FNQ-R-10A
68-2		2	Relay
68-3		2	Relay socket PYF
68-4			Connecting strip ABB
68-5	9191223	1	End cap connecting terminal ABB
68-6	9191229	2	Fuse holder, double, CHCC2D
68-7	9191222	4	End clamp din rail
68-8	9191230	2	Fuse 15 A slow, FNQ-R-15A
69	9192241		Connecting terminal small
70	9171084	1	Capacitor 4 uF
71	3500069	4	Contact A9-40-00
72	9191207	1	Contact A26-40-00
73	9191204	1	Connecting block, 1,2,3,4
74	9191205	1	Connecting block, 5,6,7
75	9191201	1	Socket for compressor
76-1	9192420	1	Cable gland, M32
76-2	3701068	1	Nut, M32
77	9192204	1	Flatcable, power sections
79	9192202	1	Power & I/O board
80	9192203	1	Extension I/O board
81	9172317	1	CPU + LCD + cable
81-1	9172315	1	CPU board
81-2	9172312	1	LCD display
81-3		1	Cable + ferrite
81-4		1	Shielding plate
81-5		4	Distance bush
82	9191101	1	Extension cable RS232
84	9194085	1	Cover plate right side
85	9190503	1	Mounting plate I/O boards

Item	Part number	Qt.	Description
85-1	9040918	4	Nut with milled edge
85-2	9073987	3	Washer M8x24
86	9194397	1	Mounting profile I/O boards
87	9190129	1	Control panel ass.
87-1	9172313	1	Keypad, 15 keys
87-2	9172318	4	Keypad, 3 key
88	9190130	1	Name panel ass.
88-1	9194028	1	Name panel
88-2	9194028	1	Mounting plate name panel
89	9194084	1	Cover plate left side
90	9192225	2	Blower
91	9193043	8	Threaded end M6 x 90
92	9194035	2	Fastening profile
92-1	9194096	2	Support profile blower (not in drawing)
92-2	9194417	4	Strengthening strip (not drawn)
93	9192043	2	Seating, shaft sealing
94	9194022	2	Cover plate
95	9192013	2	Sealing ring
96	9191049	2	Socket set-screw M5x5
97	9192083	2	Adjusting ring
98	9193042	2	Studding M6 x 180
99		2	Assembly, Rotation detection.
99-1	9194412	2	Base, vane switch
99-2	9194392	2	Swing, vane switch
99-3	9193088	2	Axle, vane switch
99-4	0188750	4	Nylon Washer 4,3x9x1,4
99-5	9191130	4	Starlock clamp washer
99-6	9191217	2	End switch
99-7	0147016	2	Screw M2,5x10, SS slotted pan head
99-8	0142293	2	Nut M2,5, SS hexagonal
100	9191149	1	Grease container
101	9191173	1	Cover grease container
102	9194424	1	Fixation plate fat bag
103	9194418	1	Support left, grease container
104	9194419	1	Support right, grease container
105	9190048	2	Filter, assembly
105-1	9194287	6	Filter gauze, vertical
105-2	9194288	6	Filter gauze, horizontale
106	9192091	2	Heating element, 10KW 208V
107	9191203	1	Water supply hose
109	9191142	4	Hose mounting clip 28mm
110	9191079	1	Joint 1"
111		1	Valve incl. cable
111-1	9191092	1	Valve, 3-way
111-2	7800443	1	Cable, 4 core
112		1	Assembly, grease drain pipe
112-1	9190505	1	Inner sliding pipe grease drain
112-2	9194431	3	Filler ring

Item	Part number	Qt.	Description
112-3	9191148	2	O-ring 29x3,5mm
112-4	9190109	1	Assembly outer sliding pipe
112-5	9190506	1	Outer sliding pipe
112-6	9192215	1	Cone, outer sliding pipe
112-7	0196673	1	Bolt, M8x25 zink plated
112-8	9008047	1	Nut, M8 zink plated
112-9	9192216	1	Locking bar
112-10	6791000	1	Knob
112-11	3701100	1	Bearing block
112-12	9191147		Gaff
112-13	9194423	1	Bracket, locking bar
114	6000032	1	Clamp, tube 26-38
116-1	9190508	1	Drain pipe grease, long
116-2	9193086	1	Studding M8x170
116-3	2650217	1	Suspension clip
116-4	3500052	1	Clamp knee 35mm
116-5	9192197	1	Drain pipe grease, short
117	9190403	1	Fan plate
117-1	9193095	4	Distance bush Ø14x6,5 L24
118	9190457	1	Filter support
118-1	9194426	1	Footplate filter support
118-2	9073149	1	Wing nut, M6
119	9192034	2	Capacitor 6 uF
120	9191200	1	Valve (quadruple) 110-127V60Hz
121	9192039	8	Clamp, tube 13-20
122	3500049	7,5m	Tube 9,5 x 16
123	9191141	2	Y-splitter
124	9191145	1,6m	Hose, dripwater 19x29
125	9193065	2	Tube, water injection
126	9193063	1	Tube, upper water injection
127	9193064	1	Tube, lower water injection
128	9194312	3	Bracket
129	3500048	2	Joint
129-1	3500144	4	Clamp ring
130	9190511	3	Drip tray door, ass.
130-1	9192155	3	Finishing strip, rubber
131	9192042	3	Hinge pin
132	9190068	3	Glass, outer incl. hinge profile
132	9190102	3	Glass, outer ass. complete
132-1	9192003	3	Glass, outer
132-2	9194411	3	Hinge profile
132-3	4302141	...m	Tape 20 x 0,8
132-4		12	Screw M5 x 16
132-5	4289966	12	Distance ring, outerglass
132-6	9172054	6	Brass bearing 8 mm
132-7	9172122	6	Brass bearing 8 mm, adjusted
132-8	9174162	18	Seal ring 15x7x0,5mm

Item	Part number	Qt.	Description
132-9	0144359	12	Nut, self locking M5
132-10	9194046	3	Mounting profile, hinge side
132-11	0142103	12	Washer M5
133	9194406	3	Fastening, door handle
134	9190400	1	Holder, baskets
134-1	9192092	1	Teflon bearing
135	9190459	3	Door handle, middle
136	9190460	3	Door handle, bottom
137	9190461	3	Door handle, top
138	9191085	6	Bearing 6 mm
139	9191102	18	Bearing 8 mm
140	9190458	3	Hinge profile
141	9194306	3	Hook, top
142	9191103	6	Threaded bush M5 x 20
143	9193061	3	Pin
144	9194307	3	Hook, bottom
145		12	Screw M5 x 10
146	9193059	12	Spacing bush
147	4280215	12	Screw M5 x 8, SS Cross recess pan head
148	9193051	3	Bar, top
149	9194269	6	Hook, door latch
150	9193052	3	Bar, bottom
151	9190429	1	Drain riddle
152	9194265	3	Profile, door latch
152-5	4289966	12	Distance bush
152-7	0144359	12	Selflocking nut M5
152-8	0142103	24	Washer M5
152-10		12	Screw M5x16
152-11	9174162	24	Filling ring 15x7x0,5mm
153	9194356	6	Filling ring handle 15x10,3x1,5
154	9194357	6	Filling ring handle 12x8,3x1,6
157	9194023	1	Air channel blowers
157-1	9194024	1	Lower air channel blowers
158-1	9194013	1	Rear top plate
158-2	9194007	1	Centre top plate
159	9194016	1	Chain box
160		3	Inner glass, ass. excl drip tray
160-1	9192239	3	Glass, inner
160-2	9190512	3	Hinge profile
160-3	9194496	3	Holder, magnet
160-4	9194116	3	Profile
160-5	3704516	12	Distance ring, innerglass 2 mm
160-6	9174163	12	Distance ring, innerglass 3 mm
160-7	0144359	12	Nut, self locking M5
160-8	0142103	24	Washer M5
160-9	9070141	24	Magnet block
160-10		12	Screw M5 x 16
160-11	9174162	24	Seal ring 15x7x0,5mm

Item	Part number	Qt.	Description
162-1	9191089	3	Sprayer, door post
162-2	9192068	1	Hose pillar
162-3	9193070	3	Seal ring, teflon
162-4	9190498	1	Spray tube side post
165		1	Spraysystem, middle, ass.
165-1	9191082	2	O-ring 22 mm
165-2	9191086	1	Sprayer, top
165-3	9191087	2	Sprayer, bottom
165-4	9191088	2	Sprayer, middle
165-5	9191090	1	Plug 3/8" SS
165-6	9191091	1	Nipple adapter 3/8 - 1/4"
165-7	9192084	1	Joint
165-8	9192161	1	Spray tube
165-9	9193069	1	Seal ring, teflon
165-10	9194320	2	Clamping plate
165-11	9190463	1	Spray tube, vertical
165-12	9191118	1	Sleeve female 1/4"
165-13	9191117	1	Hose pillar, long 1/4"
166	9194204	1	Hinge (angle), left top
166-1	9194247	2	Filling plate, left top
167	9190424	1	Hinge (angle), left bottom
167-1	9194245	2	Filling plate, left bottom
168	9190494	2	Hinge (angle), middle top
168-1	9194248	4	Filling plate, middle top
169	9190495	2	Hinge (angle), middle bottom
169-1	9194246	4	Filling plate, middle bottom
170	9190496	1	Hinge (angle), right top
170-1	9194235	2	Filling plate, right top
171	9190497	1	Hinge (angle), right bottom
171-1	9194236	2	Filling plate, right bottom
172	9192240	3	Rubber profile
174	9194100	3	Cover plate, top
176	9194026	1	Cover plate, backside
179	9190413	2	Door, electrical compartment
179-1	9192049	2	Hinge axle service door
180	9191202	1	Compressor
181		1	Capacitor, 15mF 450V
182	9191153	1	Air controlled nozzle
183	9191177	1	Elbow adaptor SS 1/4"x 6mm
184	9191183	1	Straight adaptor 1/8"x 6mm BNP
185	9191158	2	Branch tee adaptor 1/4"x 6mm BNP
186	9194464		Mounting bracket Compressor
187	9194492	1	Cover compressor
190	9194401	1	Cover plate, lower-centre
191	9194402	2	Cover plate lower-side
192-1	4280218	12	Screw M5x45, SS Cross recess pan head
192-2	2005250	12	Finishing plug
193	9192200	3	Drip tray

Item	Part number	Qt.	Description
194-1	4280216	12	Screw M5x10, SS Cross recess pan head
194-2	0144359	12	Nut M5, SS self locking hexagonal
201	9192250	1	Cap for US bottle
202	9191169	1	Nipple adapter SS for bottle cap
203	9191184	2	Elbow adaptor SS 1/8"x 6mm, revolving
204	9191171	7	Straight adaptor 1/8"x 1/8" clamp
205	9191185	1	Plug 1/8" BNP
206	9192249	1	Pressure regulator ass. 250mBar
206-1	9191186	1	Pressure regulator valve 250mBar
207	9192248	1	Pressure regulator ass. 2,5 Bar
209	9192247	1	Straight adaptor 1/4"x 6mm BNP
210	9191178		Hose blue 6mm
211	9191157	4m	Hose teflon 6.0mm
212	9191179	1	Q.C. female coupling 1/8"female black
213	9191180	1	Q.C. male coupling 1/8"male black
214	9191166	1	Q.C. female coupling 1/8"female transp.
215	9191167	1	Q.C. male coupling 1/8"male transp.
216	9192257	2	Connection pipe, SS
220	4285078	4	Nut 1/4" bsw ZP
221	9191156	4	Vibration absorber
222	9191174	1	Grid for compressor
250	9194250	1	Underframe
251	9194257	2	Front cover, curved
252	4313049	24	Clamp
253	9194256	4	Side cover, curved
254	9194347	2	Panel
255	9193083	6	Studding M10x50
256	9194255	4	Corner cover
257	9194258	1	Panel, side-rear
258	9194340	6	Cover, post
259	9194466	1	Bracket, pressure regulator
260	9194278	1	Top plate, front
261	9194264	6	Adjusting plate
262	9194279	1	Top plate, rear
263	9194251	1	Top frame
264	9194436	1	Panel, rear
265	9191176	4	Serrated nut M5x10
266	9191124	1	Filter
267	9194446	2	Stop bracket
268	9194432	1	Door, right
268	9194456	1	Door, left (in case left controlled)
269	9191106	4	Hinge
270	9194434	1	Bottle holder
271	9191182	2	Magnet 36x15x11
272	9194331	1	Door, underframe
273	9191107	1	Doorlock
274	9194253	1	Bottomplate, rear
275	9194254	6	Post

Item	Part number	Qt.	Description
276	9194252	1	Bottomplate, front
277	9084077	2	Magnet, closing
278	9191103	2	Connecting nut M5x20
279	9070840	1	Grommet 15mm
280	9194455	4	Base plate, castors
281	9191104	2	Castor
282	9191105	2	Castor with brake
283	9191213	1	Drip tray
298	9191133	1	Descaling filter head with display 300/600
299	9191203	2	Descaling filter hose 3/4"-3/4"
300	9191132	1	Descaling filter housing + cartridge
300-1	9191135		Descaling filter cartridge 600
301	9194437	1	Wallbracket for descaling filter
302	9194438	1	Wallbracket contra
303	9194457	2	Nut, 3/4"
304	9191199	1	Water valve 2xin, 1xout 110-127V60Hz
306	9194483	1	Bracket valve construction
307	9181023	1	Hose pillar 1/2"-90° -3/4" gland

FASTENERS

Item	Part number	Qt.	Description
	4280205	2	Bolt M16x25, SS hexagon head
	4288231	7	Bolt M5x10, SS hexagon serrated low head
	0211520	6	Bolt M5x12, SS hexagon head
	4312069	20	Bolt M5x12, ZP hexagon head
	9008178	3	Bolt M5x8, SS hexagon head
	4280110		Bolt M6x20, SS hexagon head
	9191041		Circlips, E type for 5mm slot
	9191142	4	Hose mounting clip 28mm
	9191126	1	Lockwasher M22, serrated
	0142030		Lockwasher M5, vaulted SS
	4289363		Lockwasher M6, ZP
	4280207	2	Nut M16, ZP hexagonal
	0142292	3	Nut M3, SS hexagonal
	0142315	1	Nut M5, SS hexagonal
	0144359	36	Nut M5, SS self locking hexagonal
	0141521		Nut M6, SS hexagonal
	9073149	4	Nut M6, SS wing
	9040918	4	Nut M8, ZP serrated
	0167519	1	Nut, Strain relief PG21
	6802013		Nut, threaded insert M5 ZP
	4285126		Nut, threaded insert M6 ZP
	4312352		Pop rivet 4x8,5, range 4,8
	0141050	3	Screw M3x10, SS Cross recess pan head
	0141075	2	Screw M3x16, SS Cross recess pan head
	0147015	2	Screw M3x25, SS slotted pan head
	4287540	12	Screw M4x10, BNP
	0141084	6	Screw M4x10, Cross recess pan head

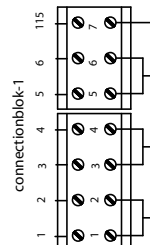
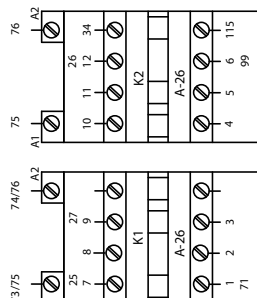
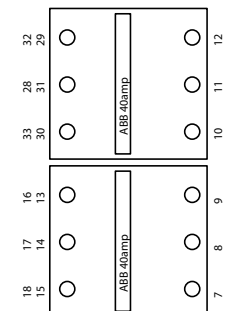
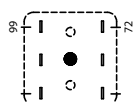
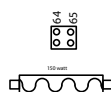
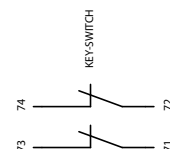
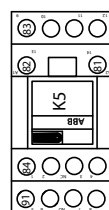
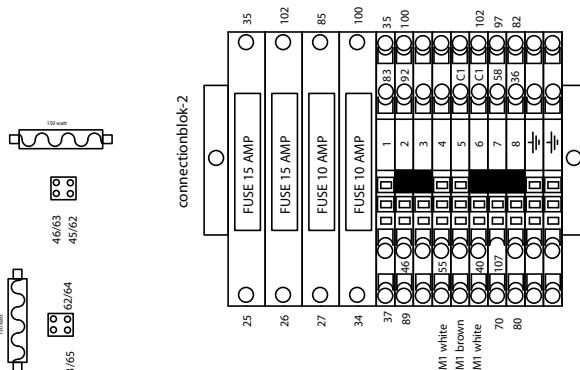
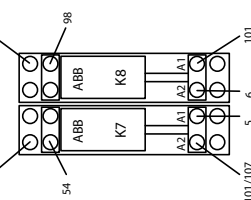
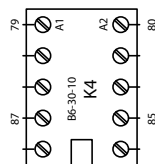
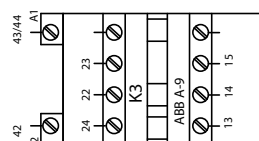
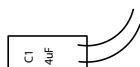
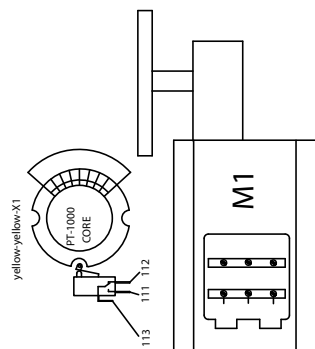
Item	Part number	Qt.	Description
	4280216		Screw M5x10, SS Cross recess pan head
	0141165	2	Screw M5x25, SS Cross recess pan head
	0147153		Screw M5x30, SS slotted pan head
	4280218		Screw M5x45, SS Cross recess pan head
	4288320	36	Screw M5x45, SS slotted pan head
	2008614	15	Sokkel TC 823 ty-rap
	4289966	24	Spacer 5,2x10x6 polystyrene
	4280566		Studding M6, 1 mtr. SS
	4281022		Studding M6, 1 mtr. ZP
	4281030		Studding M8, 1 mtr. ZP
	9193085		Studding M8x170
	9192071		Washer 10x14mm, copper
	9194348		Washer 20x6,4mm, SS
	9174680	12	Washer 5,2x20x3, SS
	0188750	4	Washer 9x4,3x1,4
	0197328	2	Washer M16, ZP plain
	4311110	24	Washer M5, SS D=3d plain
	0142103	2	Washer M5, SS plain
	4287523	20	Washer M5, ZP plain
	9073987	3	Washer M8, SS D=3d plain

FASTENERS MENTIONED IN DRAWING			
Item	Part number	Qt.	Description
112-7	0196673	1	Bolt, M8x25 ZP
160-5	3704516	12	Distance ring, innerglass 2 mm blue
160-6	9174163	12	Distance ring, innerglass 3 mm
220	4285078	4	Nut 1/4" bsw ZP
99-8	0142293	4	Nut M2,5, SS hexagonal
112-8	9008047	1	Nut, M8 ZP
99-4	0188750	4	Nylon Washer 4,3x9x1,4
99-7	0147016	4	Screw M2,5x10, SS slotted pan head
147	4280215	12	Screw M5 x 8, SS Cross recess pan head
194-1	4280216	12	Screw M5x10, SS Cross recess pan head
192-1	4280218	12	Screw M5x45, SS Cross recess pan head
132-8	9174162	18	Seal ring 15x7x0,5mm blue
152-11	9174162	24	Seal ring 15x7x0,5mm blue
160-11	9174162	24	Seal ring 15x7x0,5mm blue
96	9191049	2	Socket set-screw M5x5
99-5	9191130	4	Washer 3mm starlock, push on retaining
132-11	0142103	12	Washer M5

MISCELLANEOUS			
Item	Part number	Qt.	Description
	9191154		Cleaning fluid 5l
	9191210		Feather key 5x5x20 DIN6885A
	9191150		Grease bag 10 Ltr
	9190073		Handle lock
	9193091		Lock bushing for transport
	9191109		Lubricant OKS 250Moly P1900 - 400 gr.
	9074129		Oven gloves, not printed
	9191136		Pipe brush
	9191146		Pipe brush little
	3500306		Sealant silicon red 343°C
	4302335		Sealant silicon, aluminum 450°F
	9061045		Silicon spray Eurogrill 0,4ltr
	2650536		Sound absorbing material, self-adhesive
	9191187		Spiral protecting conduit Ø6.4mm
	9191211		Spiral protecting conduit Ø8mm
	4302170		Spiral protecting conduit PE 1/4"
	9123523		Sticker Backflow USA
	9110111		Sticker caution hot
	9123148		Sticker high temperature
	9123516		Sticker ON-OFF USA
	9110860		Sticker ventilator
	9123389		Sticker Warning California
	9123484		Sticker warning replacing lamps
	9123456		Sticker Warning secure to building
	9123672		Sticker Warning USA
	9123527		Sticker, place cleaner
	9171110		Terminal block, 2 pole porcelain
	9123517		Wiring instruction plate Multiserie
	0260155		Wire AWG18 black
	9070654		Wire AWG 14 black
	9079137		Wire AWG 12 black
	9079140		Wire AWG 12 yellow/green
	9192256		Centring tool, blowers

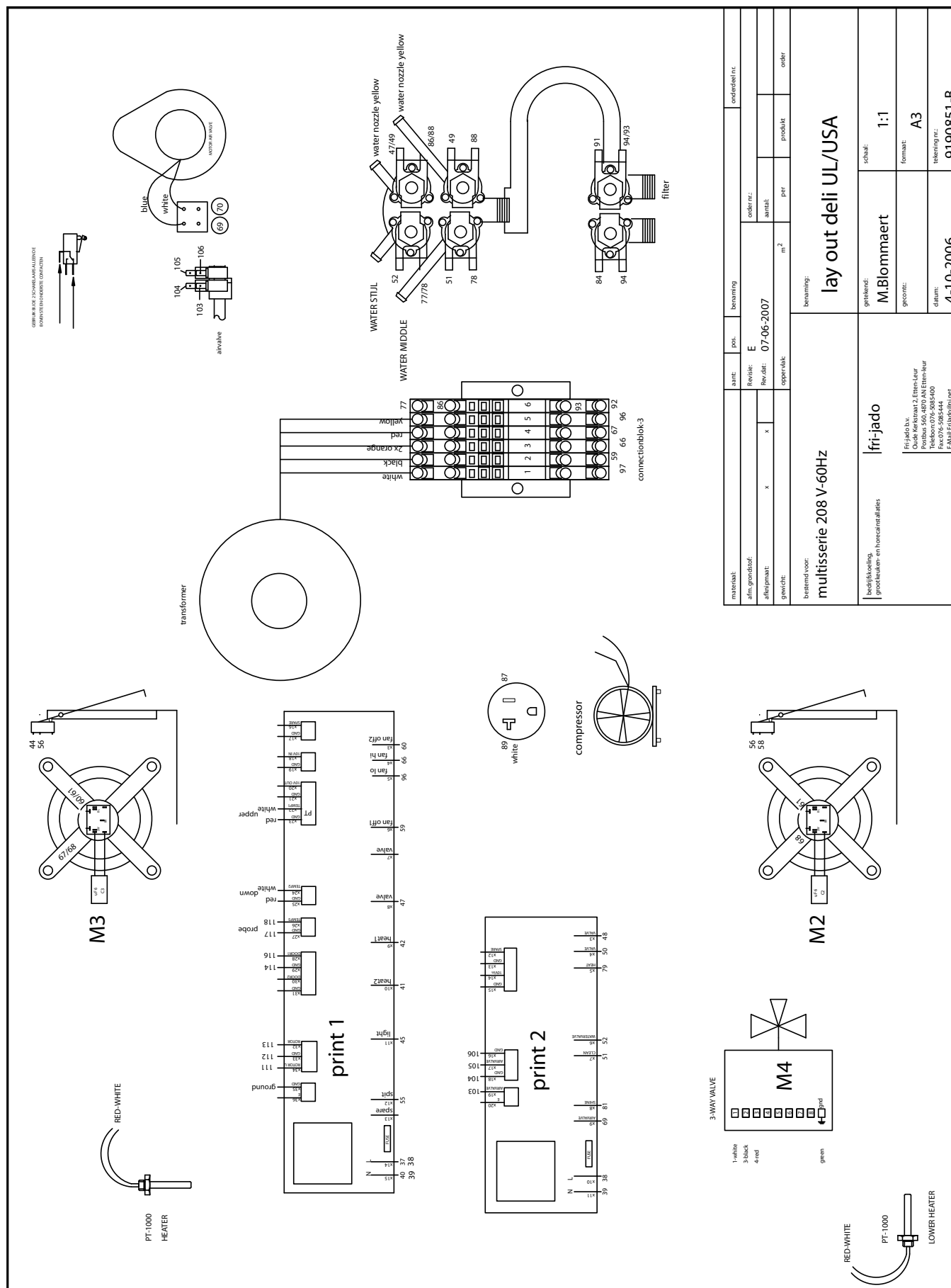
USED SHORT FORMS	
SS	Stainless steel
ZP	Zink plated
BNP	Brass, nickel plated
Q.C.	Q.C. = Quick connect

upper element

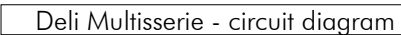


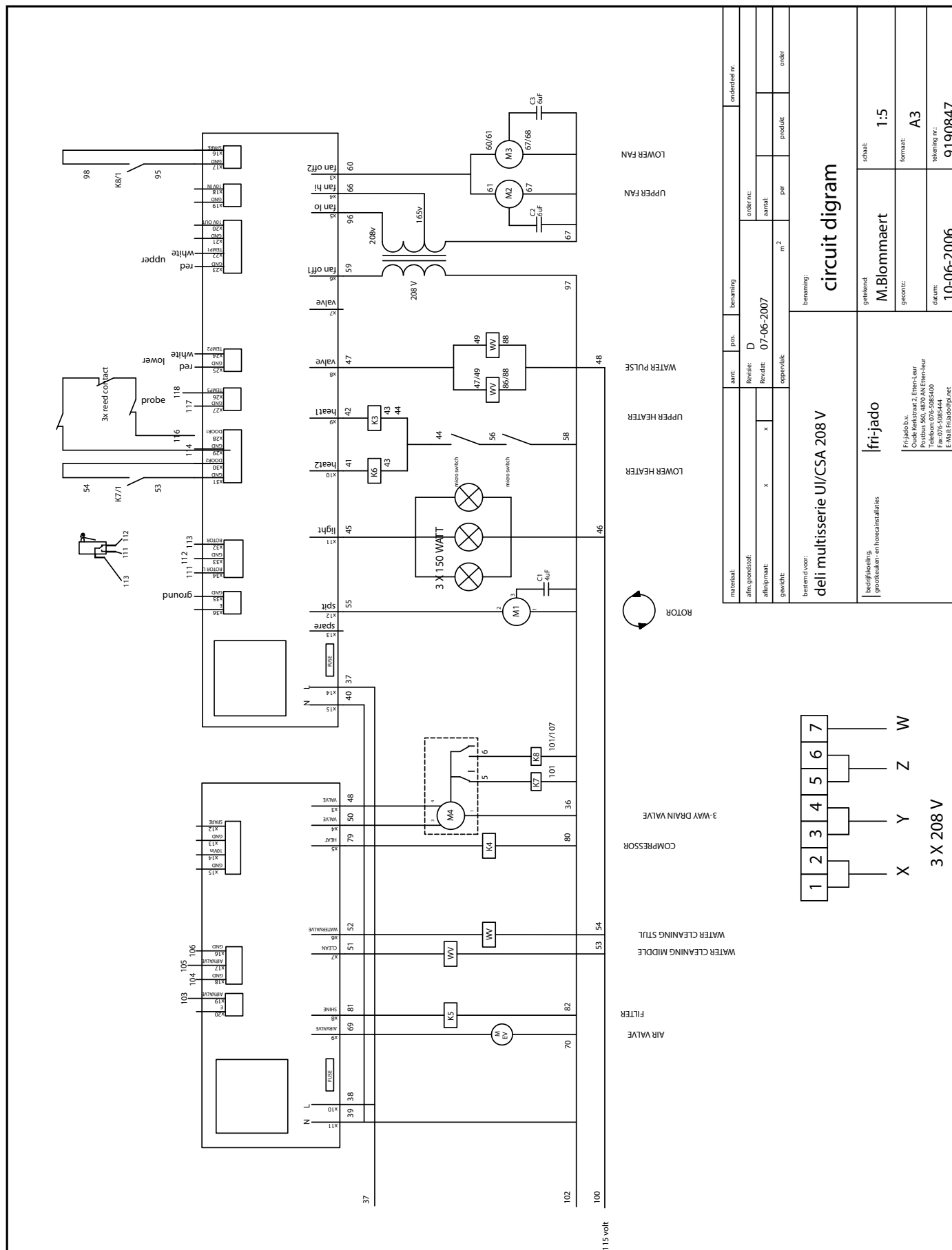
Oeli Multiserie - wiring diagram

CORRELATION - 4									
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afm. grondstof:	E					order nr:			
aflevering:	x		07-06-2007		aanpak				
grootte:			m ²		per		product		order
bestemd voor:			benaming:						
multiseries 208 V-60Hz			lay out deli UL/USA						
bestrijdingsgrootte:			gerekend:			schakel			
afrij-jado			M.Blommaert			1:1			
afrij-jado Oude Kerkstraat 2, Etten-Leur Postbus 5650, 48190 AN Etten-Leur Telefoon 036-5985400 Fax 036-5985401 E-Mail: Frijs@rij-jado.nl			gemaakt:			formaat:			
						A3			
						tekening nr.:			
						9190851-A			
						datum:			
						4-10-2006			



Deli Multiserie - wiring diagram





Deli Multiserie - circuit diagram

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